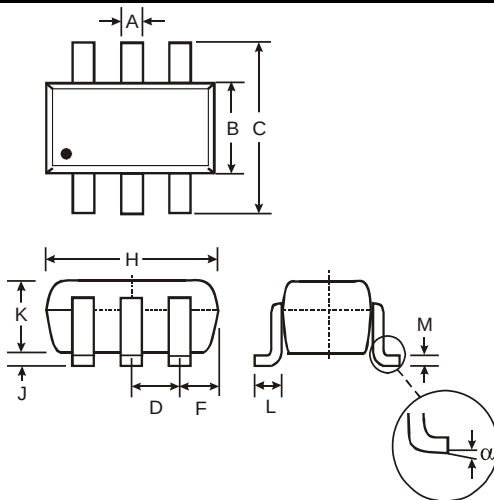


## Features

- Epitaxial Planar Die Construction
- One Transistor and One Switching Diode in One Package
- Lead Free By Design/RoHS Compliant (Note 1)
- "Green" Device (Note 2)

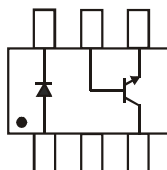
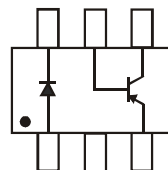
## Mechanical Data

- Case: SOT-363
- Case Material: Molded Plastic. "Green" Molding Compound. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020D
- Terminal Connections: See Diagram
- Terminals: Finish - Matte Tin annealed over Alloy 42 leadframe. Solderable per MIL-STD-202, Method 208
- Marking Information: See Page 8
- Ordering Information: See Page 8
- Weight: 0.008 grams (approximate)

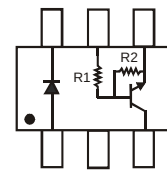
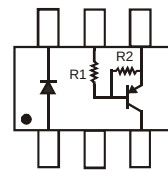


| SOT-363              |              |      |
|----------------------|--------------|------|
| Dim                  | Min          | Max  |
| A                    | 0.10         | 0.30 |
| B                    | 1.15         | 1.35 |
| C                    | 2.00         | 2.20 |
| D                    | 0.65 Nominal |      |
| F                    | 0.30         | 0.40 |
| H                    | 1.80         | 2.20 |
| J                    | —            | 0.10 |
| K                    | 0.90         | 1.00 |
| L                    | 0.25         | 0.40 |
| M                    | 0.10         | 0.25 |
| $\alpha$             | 0°           | 8°   |
| All Dimensions in mm |              |      |

| P/N      | R1 (NOM) | R2 (NOM) |
|----------|----------|----------|
| DRDNB16W | 1K       | 10K      |
| DRDPB16W | 1K       | 10K      |
| DRDNB26W | 220      | 4.7K     |
| DRDPB26W | 220      | 4.7K     |


 DRDN010W/  
DRDN005W


DRDP006W


 DRDNB16W/  
DRDNB26W

 DRDPB16W/  
DRDPB26W

## Maximum Ratings, Total Device @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic                                       | Symbol                            | Value       | Unit |
|------------------------------------------------------|-----------------------------------|-------------|------|
| Power Dissipation (Note 3)                           | P <sub>D</sub>                    | 200         | mW   |
| Thermal Resistance, Junction to Ambient Air (Note 3) | R <sub>θJA</sub>                  | 625         | °C/W |
| Operating and Storage Temperature Range              | T <sub>J</sub> , T <sub>STG</sub> | -55 to +150 | °C   |

## Maximum Ratings, DRDN010W NPN Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic             | Symbol           | Value | Unit |
|----------------------------|------------------|-------|------|
| Collector-Base Voltage     | V <sub>CBO</sub> | 45    | V    |
| Collector-Emitter Voltage  | V <sub>CEO</sub> | 18    | V    |
| Emitter-Base Voltage       | V <sub>EBO</sub> | 5     | V    |
| Collector Current (Note 3) | I <sub>C</sub>   | 1000  | mA   |

## Maximum Ratings, DRDN005W NPN Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic                          | Symbol           | Value | Unit |
|-----------------------------------------|------------------|-------|------|
| Collector-Base Voltage                  | V <sub>CBO</sub> | 80    | V    |
| Collector-Emitter Voltage               | V <sub>CEO</sub> | 80    | V    |
| Emitter-Base Voltage                    | V <sub>EBO</sub> | 4.0   | V    |
| Collector Current – Continuous (Note 3) | I <sub>C</sub>   | 500   | mA   |

- Notes:
1. No purposefully added lead.
  2. Diodes Inc.'s "Green" policy can be found on our website at [http://www.diodes.com/products/lead\\_free/index.php](http://www.diodes.com/products/lead_free/index.php).
  3. Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch; pad layout as shown on Diodes Inc. suggested pad layout document AP02001, which can be found on page 9 or our website at <http://www.diodes.com/datasheets/ap02001.pdf>.

### Maximum Ratings, DRDP006W PNP Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic             | Symbol           | Value | Unit |
|----------------------------|------------------|-------|------|
| Collector-Base Voltage     | V <sub>CBO</sub> | -60   | V    |
| Collector-Emitter Voltage  | V <sub>CEO</sub> | -60   | V    |
| Emitter-Base Voltage       | V <sub>EBO</sub> | -5.0  | V    |
| Collector Current (Note 3) | I <sub>C</sub>   | -600  | mA   |

### Maximum Ratings, DRDNB16W Pre-Biased NPN Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic | Symbol          | Value     | Unit |
|----------------|-----------------|-----------|------|
| Supply Voltage | V <sub>CC</sub> | 50        | V    |
| Input Voltage  | V <sub>IN</sub> | -5 to +10 | V    |
| Output Current | I <sub>C</sub>  | 600       | mA   |

### Maximum Ratings, DRDNB26W Pre-Biased NPN Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic | Symbol          | Value    | Unit |
|----------------|-----------------|----------|------|
| Supply Voltage | V <sub>CC</sub> | 50       | V    |
| Input Voltage  | V <sub>IN</sub> | -5 to +5 | V    |
| Output Current | I <sub>C</sub>  | 600      | mA   |

### Maximum Ratings, DRDPB16W Pre-Biased PNP Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic | Symbol          | Value     | Unit |
|----------------|-----------------|-----------|------|
| Supply Voltage | V <sub>CC</sub> | -50       | V    |
| Input Voltage  | V <sub>IN</sub> | +5 to -10 | V    |
| Output Current | I <sub>C</sub>  | 600       | mA   |

### Maximum Ratings, DRDPB26W Pre-Biased PNP Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic | Symbol          | Value    | Unit |
|----------------|-----------------|----------|------|
| Supply Voltage | V <sub>CC</sub> | -50      | V    |
| Input Voltage  | V <sub>IN</sub> | +5 to -5 | V    |
| Output Current | I <sub>C</sub>  | -600     | mA   |

### Maximum Ratings, Switching Diode @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic                            | Symbol              | Value | Unit |
|-------------------------------------------|---------------------|-------|------|
| Non-Repetitive Peak Reverse Voltage       | V <sub>RM</sub>     | 100   | V    |
| Peak Repetitive Reverse Voltage           | V <sub>RRM</sub>    | 75    | V    |
| Working Peak Reverse Voltage              | V <sub>RWM</sub>    |       |      |
| DC Blocking Voltage                       | V <sub>R</sub>      |       |      |
| RMS Reverse Voltage                       | V <sub>R(RMS)</sub> | 53    | V    |
| Forward Continuous Current (Note 3)       | I <sub>FM</sub>     | 500   | mA   |
| Average Rectified Output Current (Note 3) | I <sub>O</sub>      | 250   | mA   |
| Non-Repetitive Peak Forward Surge Current | I <sub>FSM</sub>    | 4.0   | A    |
|                                           |                     | 2.0   |      |

## Electrical Characteristics, DRDN010W NPN Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic                       | Symbol        | Min | Max | Unit          | Test Condition                                                    |
|--------------------------------------|---------------|-----|-----|---------------|-------------------------------------------------------------------|
| DC Current Gain                      | $h_{FE}$      | 150 | 800 | —             | $I_C = 100\text{mA}$ , $V_{CE} = 1\text{V}$                       |
| Collector-Emitter Saturation Voltage | $V_{CE(SAT)}$ | —   | 0.5 | V             | $I_C = 300\text{mA}$ , $I_B = 30\text{mA}$                        |
| Collector-Base Breakdown Voltage     | $V_{(BR)CBO}$ | 45  | —   | V             | $I_C = 100\mu\text{A}$ , $I_E = 0$                                |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$ | 18  | —   | V             | $I_C = 1\text{mA}$ , $I_B = 0$                                    |
| Emitter-Base Breakdown Voltage       | $V_{(BR)EBO}$ | 5   | —   | V             | $I_E = 100\mu\text{A}$ , $I_C = 0$                                |
| Collector Cutoff Current             | $I_{CBO}$     | —   | 1   | $\mu\text{A}$ | $V_{CB} = 40\text{V}$ , $I_E = 0$                                 |
| Emitter Cutoff Current               | $I_{EBO}$     | —   | 1   | $\mu\text{A}$ | $V_{EB} = 4\text{V}$ , $I_C = 0$                                  |
| Current Gain-Bandwidth Product       | $f_T$         | 100 | —   | MHz           | $V_{CE} = 10\text{V}$ , $I_C = 50\text{mA}$ , $f = 100\text{MHz}$ |
| Capacitance                          | $C_{obo}$     | —   | 8   | pF            | $V_{CB} = 10\text{V}$ , $I_E = 0$ , $f = 1\text{MHz}$             |

## Electrical Characteristics, DRDN005W NPN Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic                       | Symbol        | Min | Max  | Unit | Test Condition                                                                                |
|--------------------------------------|---------------|-----|------|------|-----------------------------------------------------------------------------------------------|
| Collector-Base Breakdown Voltage     | $V_{(BR)CBO}$ | 80  | —    | V    | $I_C = 100\mu\text{A}$ , $I_E = 0$                                                            |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$ | 80  | —    | V    | $I_C = 1.0\text{mA}$ , $I_B = 0$                                                              |
| Emitter-Base Breakdown Voltage       | $V_{(BR)EBO}$ | 4.0 | —    | V    | $I_E = 100\mu\text{A}$ , $I_C = 0$                                                            |
| Collector Cutoff Current             | $I_{CBO}$     | —   | 100  | nA   | $V_{CB} = 60\text{V}$ , $I_E = 0$<br>$V_{CB} = 80\text{V}$ , $I_E = 0$                        |
| Collector Cutoff Current             | $I_{CES}$     | —   | 100  | nA   | $V_{CE} = 60\text{V}$ , $I_{BO} = 0\text{V}$<br>$V_{CE} = 80\text{V}$ , $I_{BO} = 0\text{V}$  |
| DC Current Gain                      | $h_{FE}$      | 100 | —    | —    | $I_C = 10\text{mA}$ , $V_{CE} = 1.0\text{V}$<br>$I_C = 100\text{mA}$ , $V_{CE} = 1.0\text{V}$ |
| Collector-Emitter Saturation Voltage | $V_{CE(SAT)}$ | —   | 0.25 | V    | $I_C = 100\text{mA}$ , $I_B = 10\text{mA}$                                                    |
| Base-Emitter Saturation Voltage      | $V_{BE(SAT)}$ | —   | 1.2  | V    | $I_C = 100\text{mA}$ , $V_{CE} = 1.0\text{V}$                                                 |
| Current Gain-Bandwidth Product       | $f_T$         | 100 | —    | MHz  | $V_{CE} = 2.0\text{V}$ , $I_C = 10\text{mA}$ ,<br>$f = 100\text{MHz}$                         |

## Electrical Characteristics, DRDP006W PNP Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic                       | Symbol        | Min | Max  | Unit | Test Condition                                                      |
|--------------------------------------|---------------|-----|------|------|---------------------------------------------------------------------|
| DC Current Gain                      | $h_{FE}$      | 100 | 300  | —    | $I_C = -150\text{mA}$ , $V_{CE} = -10\text{V}$                      |
| Collector-Emitter Saturation Voltage | $V_{CE(SAT)}$ | —   | -0.4 | V    | $I_C = -150\text{mA}$ , $I_B = -15\text{mA}$                        |
| Collector-Base Breakdown Voltage     | $V_{(BR)CBO}$ | -60 | —    | V    | $I_C = -10\mu\text{A}$ , $I_E = 0$                                  |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$ | -60 | —    | V    | $I_C = -10\text{mA}$ , $I_B = 0$                                    |
| Emitter-Base Breakdown Voltage       | $V_{(BR)EBO}$ | -5  | —    | V    | $I_E = -10\mu\text{A}$ , $I_C = 0$                                  |
| Collector Cutoff Current             | $I_{CBO}$     | —   | -10  | nA   | $V_{CB} = -50\text{V}$ , $I_E = 0$                                  |
| Current Gain-Bandwidth Product       | $f_T$         | 200 | —    | MHz  | $V_{CE} = -20\text{V}$ , $I_C = -50\text{mA}$ , $f = 100\text{MHz}$ |
| Capacitance                          | $C_{obo}$     | —   | 8    | pF   | $V_{CB} = -10\text{V}$ , $I_E = 0$ , $f = 1\text{MHz}$              |

## Electrical Characteristics, DRDNB16W Pre-Biased NPN Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic         | Symbol       | Min | Typ | Max  | Unit          | Test Condition                                                   |
|------------------------|--------------|-----|-----|------|---------------|------------------------------------------------------------------|
| Input Voltage          | $V_{I(off)}$ | 0.3 | —   | —    | V             | $V_{CC} = 5\text{V}$ , $I_O = 100\mu\text{A}$                    |
|                        | $V_{I(on)}$  | —   | —   | 2.0  | V             | $V_O = 0.3\text{V}$ , $I_O = 20\text{mA}$                        |
| Output Voltage         | $V_{O(on)}$  | —   | —   | 0.3V | V             | $I_O/I_I = 50\text{mA}/2.5\text{mA}$                             |
| Input Current          | $I_I$        | —   | —   | 7.2  | mA            | $V_I = 5\text{V}$                                                |
| Output Current         | $I_{O(off)}$ | —   | —   | 0.5  | $\mu\text{A}$ | $V_{CC} = 50\text{V}$ , $V_I = 0\text{V}$                        |
| DC Current Gain        | $G_I$        | 56  | —   | —    | —             | $V_O = 5\text{V}$ , $I_O = 50\text{mA}$                          |
| Gain-Bandwidth Product | $f_T$        | —   | 200 | —    | MHz           | $V_{CE} = 10\text{V}$ , $I_E = 5\text{mA}$ , $f = 100\text{MHz}$ |

## Electrical Characteristics, DRDNB26W Pre-Biased NPN Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic         | Symbol              | Min | Typ | Max  | Unit | Test Condition                                          |
|------------------------|---------------------|-----|-----|------|------|---------------------------------------------------------|
| Input Voltage          | V <sub>I(off)</sub> | 0.5 | —   | —    | V    | V <sub>CC</sub> = 5V, I <sub>O</sub> = 100μA            |
|                        | V <sub>I(on)</sub>  | —   | —   | 3.0  | V    | V <sub>O</sub> = 0.3V, I <sub>O</sub> = 20mA            |
| Output Voltage         | V <sub>O(on)</sub>  | —   | —   | 0.3V | V    | I <sub>O</sub> /I <sub>I</sub> = 50mA/2.5mA             |
| Input Current          | I <sub>I</sub>      | —   | —   | 28   | mA   | V <sub>I</sub> = 5V                                     |
| Output Current         | I <sub>O(off)</sub> | —   | —   | 0.5  | μA   | V <sub>CC</sub> = 50V, V <sub>I</sub> = 0V              |
| DC Current Gain        | G <sub>I</sub>      | 47  | —   | —    | —    | V <sub>O</sub> = 5V, I <sub>O</sub> = 50mA              |
| Gain-Bandwidth Product | f <sub>T</sub>      | —   | 200 | —    | MHz  | V <sub>CE</sub> = 10V, I <sub>E</sub> = 5mA, f = 100MHz |

## Electrical Characteristics, DRDPB16W Pre-Biased PNP Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic         | Symbol              | Min  | Typ | Max   | Unit | Test Condition                                            |
|------------------------|---------------------|------|-----|-------|------|-----------------------------------------------------------|
| Input Voltage          | V <sub>I(off)</sub> | -0.3 | —   | —     | V    | V <sub>CC</sub> = -5V, I <sub>O</sub> = -100μA            |
|                        | V <sub>I(on)</sub>  | —    | —   | -2.0  | V    | V <sub>O</sub> = -0.3V, I <sub>O</sub> = -20mA            |
| Output Voltage         | V <sub>O(on)</sub>  | —    | —   | -0.3V | V    | I <sub>O</sub> /I <sub>I</sub> = -50mA/-2.5mA             |
| Input Current          | I <sub>I</sub>      | —    | —   | -7.2  | mA   | V <sub>I</sub> = -5V                                      |
| Output Current         | I <sub>O(off)</sub> | —    | —   | -0.5  | μA   | V <sub>CC</sub> = -50V, V <sub>I</sub> = 0V               |
| DC Current Gain        | G <sub>I</sub>      | 56   | —   | —     | —    | V <sub>O</sub> = -5V, I <sub>O</sub> = -50mA              |
| Gain-Bandwidth Product | f <sub>T</sub>      | —    | 200 | —     | MHz  | V <sub>CE</sub> = -10V, I <sub>E</sub> = -5mA, f = 100MHz |

## Electrical Characteristics, DRDPB26W Pre-Biased PNP Transistor @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic         | Symbol              | Min  | Typ | Max   | Unit | Test Condition                                            |
|------------------------|---------------------|------|-----|-------|------|-----------------------------------------------------------|
| Input Voltage          | V <sub>I(off)</sub> | -0.5 | —   | —     | V    | V <sub>CC</sub> = -5V, I <sub>O</sub> = -100μA            |
|                        | V <sub>I(on)</sub>  | —    | —   | -3.0  | V    | V <sub>O</sub> = -0.3V, I <sub>O</sub> = -20mA            |
| Output Voltage         | V <sub>O(on)</sub>  | —    | —   | -0.3V | V    | I <sub>O</sub> /I <sub>I</sub> = -50mA/-2.5mA             |
| Input Current          | I <sub>I</sub>      | —    | —   | -28   | mA   | V <sub>I</sub> = -5V                                      |
| Output Current         | I <sub>O(off)</sub> | —    | —   | -0.5  | μA   | V <sub>CC</sub> = -50V, V <sub>I</sub> = 0V               |
| DC Current Gain        | G <sub>I</sub>      | 47   | —   | —     | —    | V <sub>O</sub> = -5V, I <sub>O</sub> = -50mA              |
| Gain-Bandwidth Product | f <sub>T</sub>      | —    | 200 | —     | MHz  | V <sub>CE</sub> = -10V, I <sub>E</sub> = -5mA, f = 100MHz |

## Electrical Characteristics, Switching Diode @T<sub>A</sub> = 25°C unless otherwise specified

| Characteristic                     | Symbol             | Min  | Max   | Unit | Test Condition                                                                                            |
|------------------------------------|--------------------|------|-------|------|-----------------------------------------------------------------------------------------------------------|
| Reverse Breakdown Voltage (Note 4) | V <sub>(BR)R</sub> | 75   | —     | —    | I <sub>R</sub> = 10μA                                                                                     |
| Forward Voltage                    | V <sub>F</sub>     | 0.62 | 0.72  | V    | I <sub>F</sub> = 5.0mA                                                                                    |
|                                    |                    | —    | 0.855 |      | I <sub>F</sub> = 10mA                                                                                     |
|                                    |                    | —    | 1.0   |      | I <sub>F</sub> = 100mA                                                                                    |
|                                    |                    | —    | 1.25  |      | I <sub>F</sub> = 150mA                                                                                    |
| Reverse Current (Note 4)           | I <sub>R</sub>     | —    | 2.5   | μA   | V <sub>R</sub> = 75V                                                                                      |
|                                    |                    |      | 50    | μA   | V <sub>R</sub> = 75V, T <sub>J</sub> = 150°C                                                              |
|                                    |                    |      | 30    | μA   | V <sub>R</sub> = 25V, T <sub>J</sub> = 150°C                                                              |
|                                    |                    |      | 25    | nA   | V <sub>R</sub> = 20V                                                                                      |
| Total Capacitance                  | C <sub>T</sub>     | —    | 4.0   | pF   | V <sub>R</sub> = 0, f = 1.0MHz                                                                            |
| Reverse Recovery Time              | t <sub>rr</sub>    | —    | 4.0   | ns   | I <sub>F</sub> = I <sub>R</sub> = 10mA,<br>I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100Ω |

Notes: 4. Short duration pulse test used to minimize self-heating effect.

## Device Characteristics

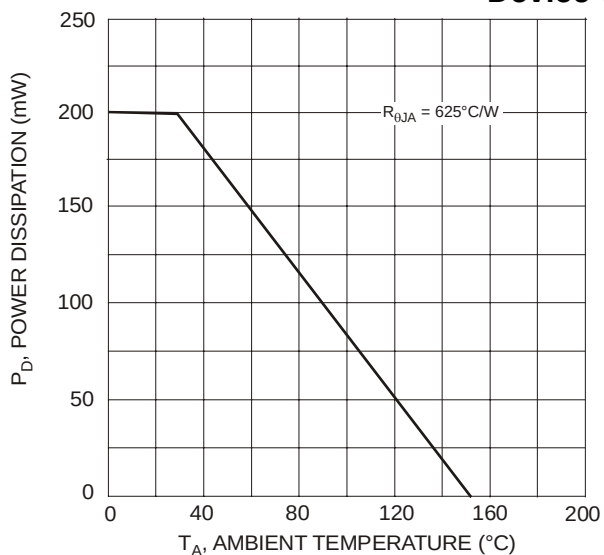


Fig. 1, Power Derating Curve (Total Device)

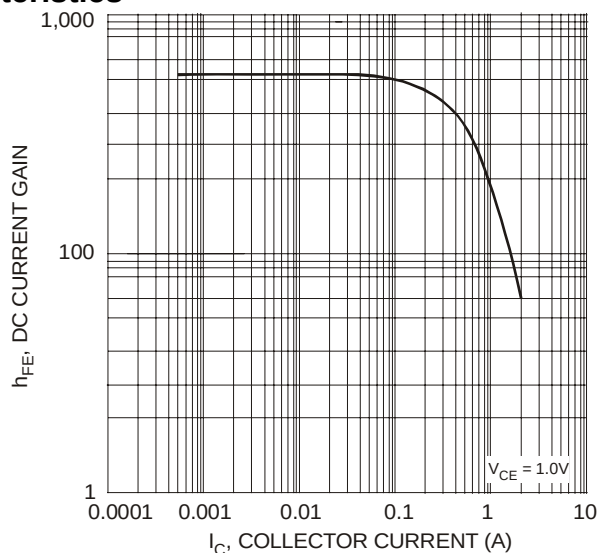


Fig. 2, Typical DC Current Gain vs. Collector Current (DRDN010W)

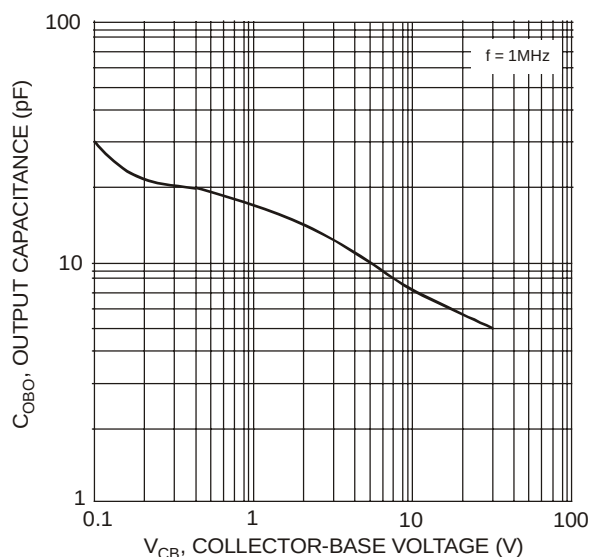


Fig. 3, Typical Output Capacitance vs. Collector-Base Voltage (DRDN010W)

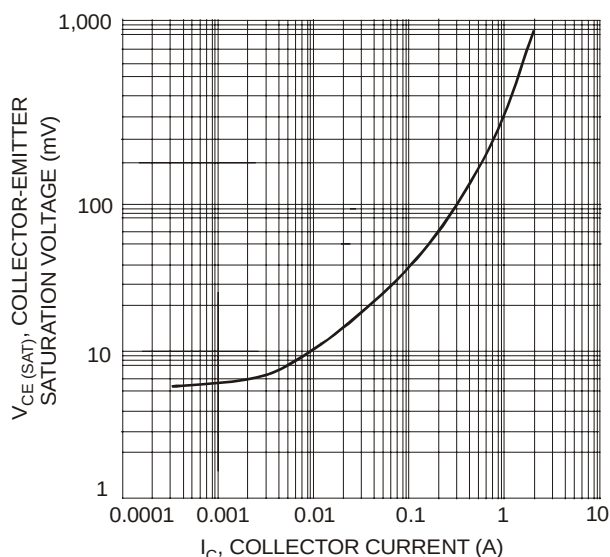


Fig. 4, Typical Collector Saturation Voltage vs. Collector Current (DRDN010W)

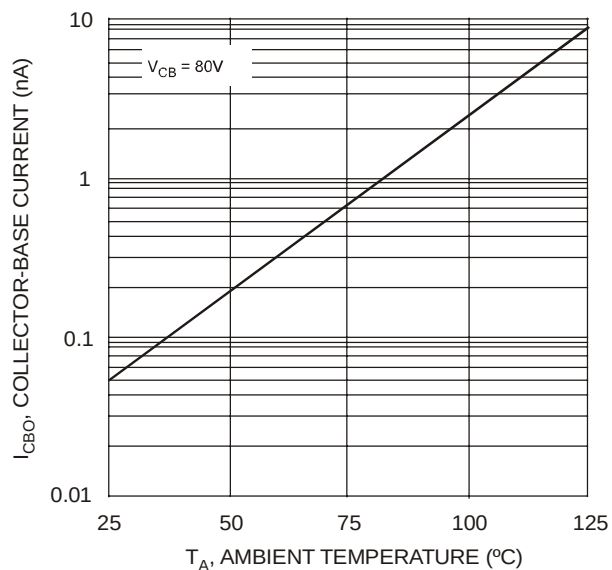


Fig. 5, Typical Collector-Cutoff Current vs. Ambient Temperature (DRDN005W)

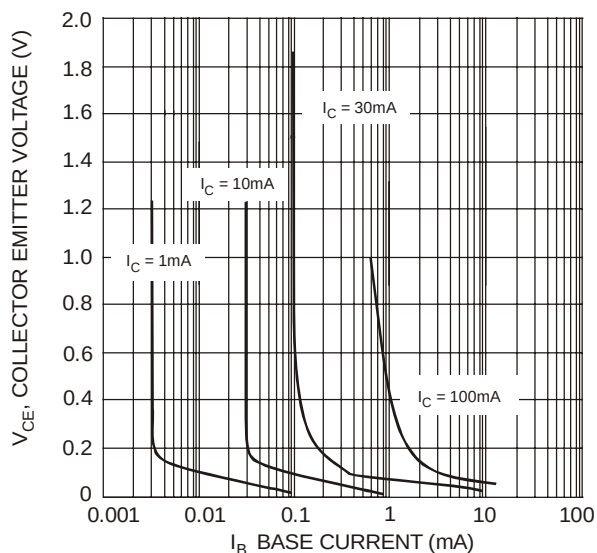


Fig. 6, Typical Collector Saturation Region (DRDN005W)

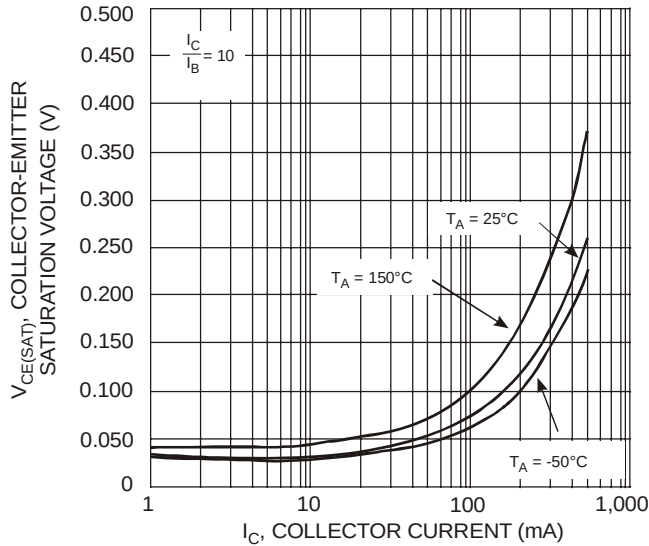


Fig. 7, Typical Collector-Emitter Saturation Voltage vs. Collector Current (DRDN005W)

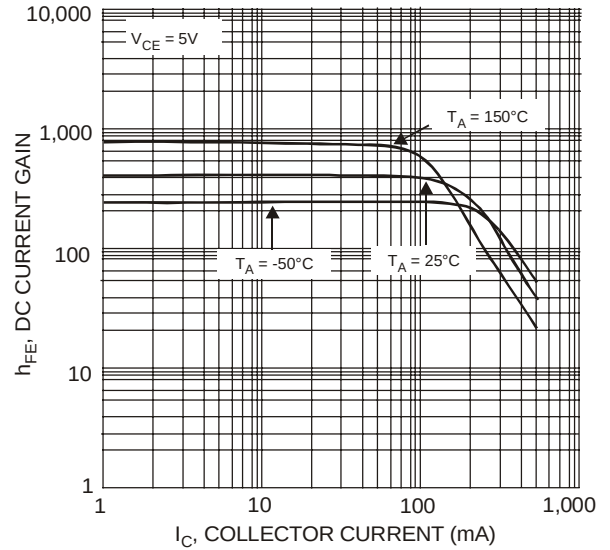


Fig. 8, Typical DC Current Gain vs. Collector Current (DRDN005W)

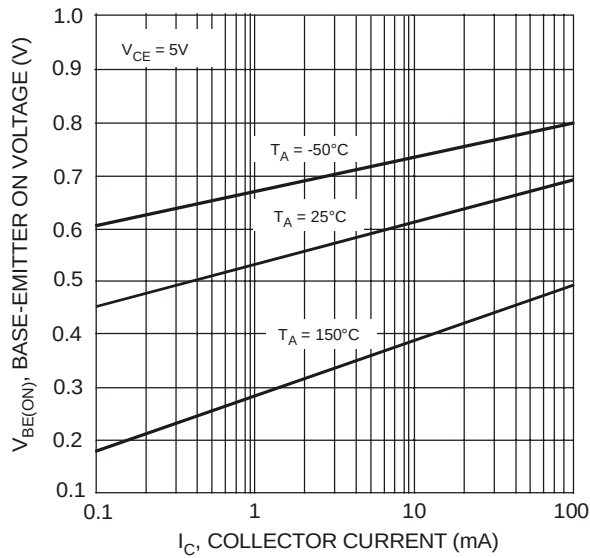


Fig. 9, Typical Base-Emitter On Voltage vs. Collector Current (DRDN005W)

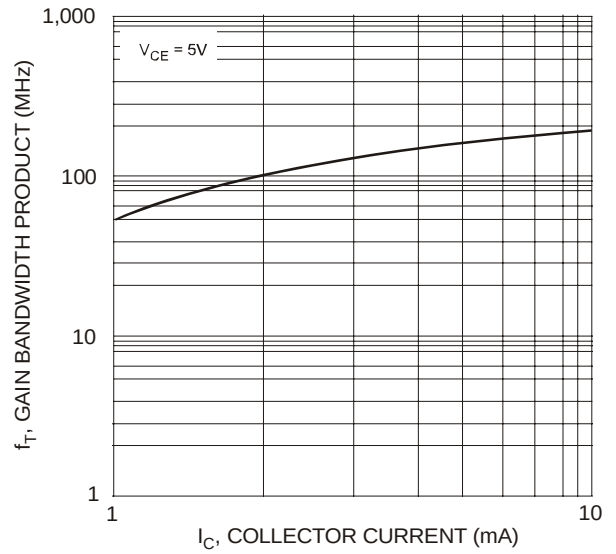


Fig. 10, Typical Gain Bandwidth Product vs. Collector Current (DRDN005W)

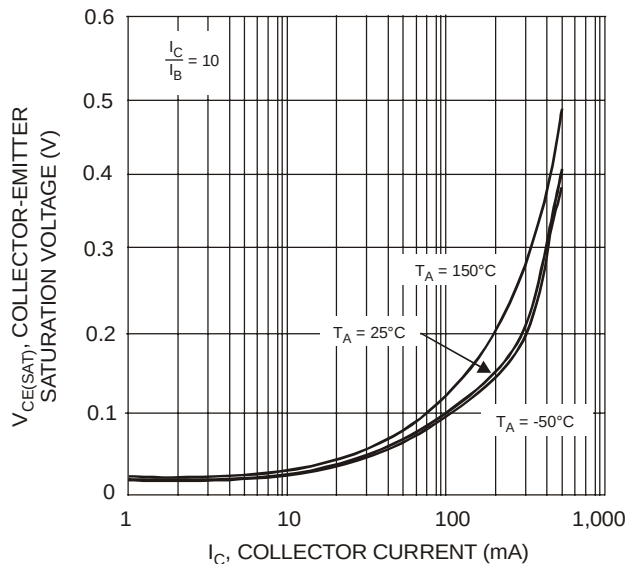


Fig. 11, Typical Collector-Emitter Saturation Voltage vs. Collector Current (DRDP006W)

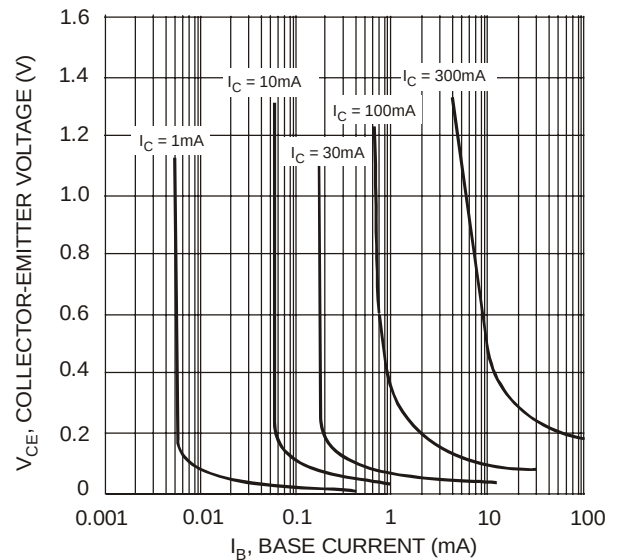


Fig. 12, Typical Collector Saturation Region (DRDP006W)

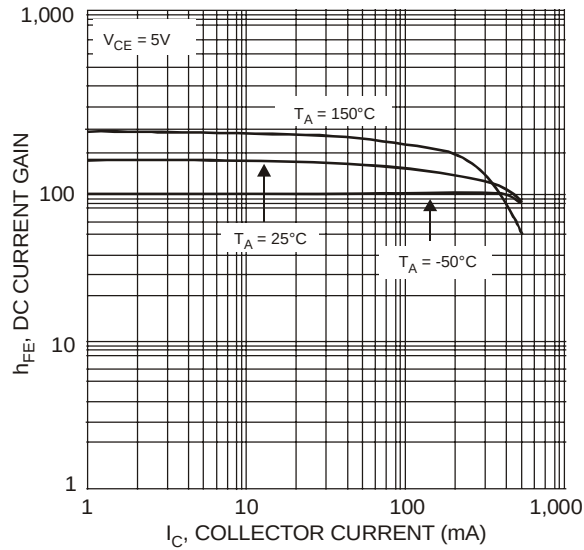


Fig. 13, Typical DC Current Gain vs. Collector Current (DRDP006W)

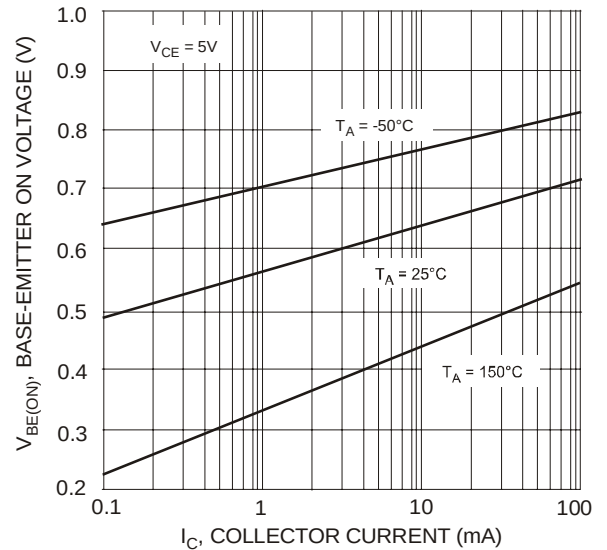


Fig. 14, Typical Base-Emitter On Voltage vs. Collector Current (DRDP006W)

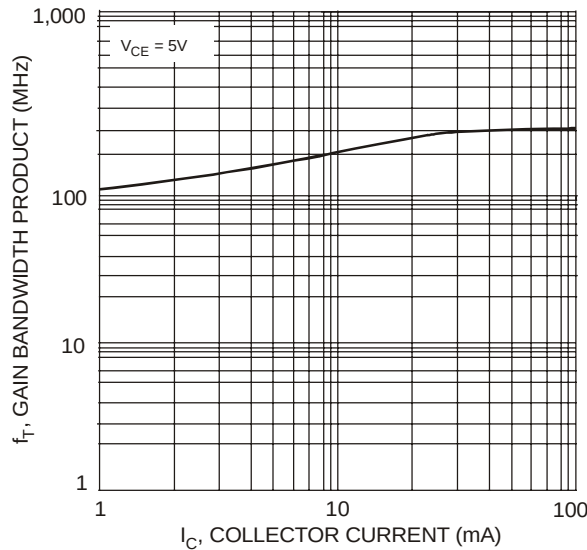


Fig. 15, Typical Gain Bandwidth Product vs. Collector Current (DRDP006W)

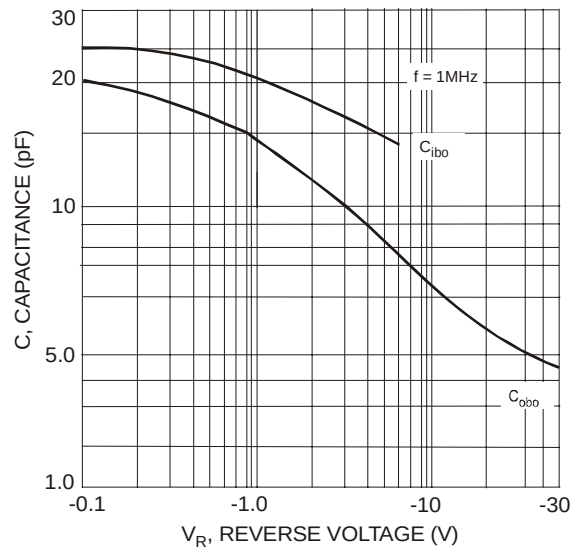


Fig. 16, Typical Capacitance (DRDP006W)

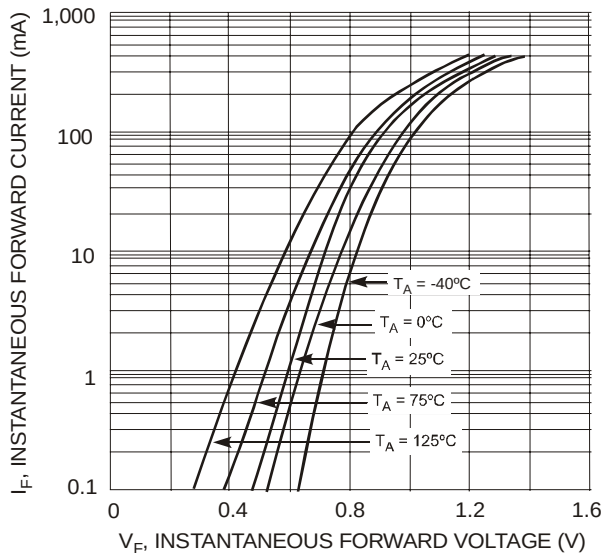


Fig. 17, Typical Forward Characteristics (Switching Diode)

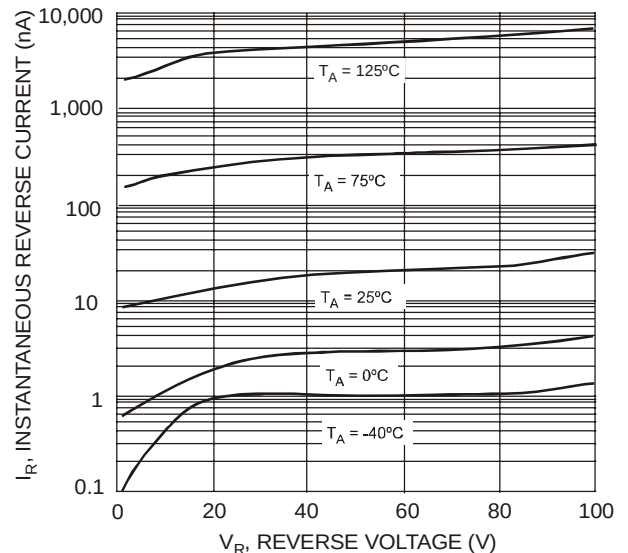


Fig. 18, Typical Reverse Characteristics (Switching Diode)

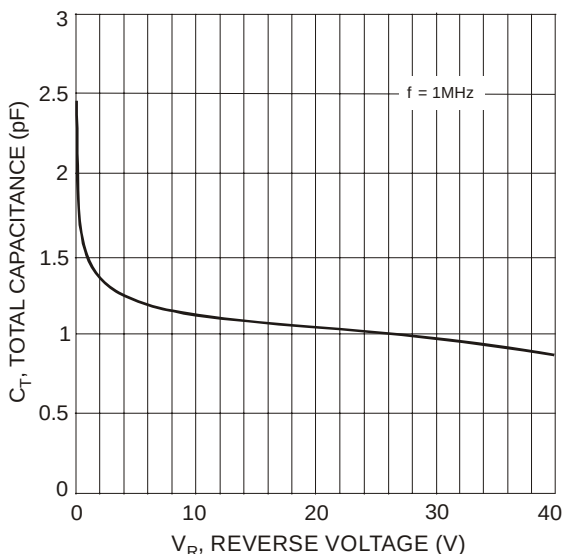


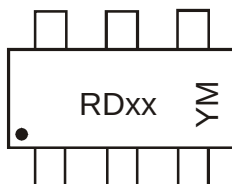
Fig. 19, Typical Capacitance vs. Reverse Voltage (Switching Diode)

## Ordering Information (Note 5)

| Device     | Packaging | Shipping         |
|------------|-----------|------------------|
| DRDN010W-7 | SOT-363   | 3000/Tape & Reel |
| DRDP006W-7 | SOT-363   | 3000/Tape & Reel |
| DRDNB16W-7 | SOT-363   | 3000/Tape & Reel |
| DRDNB26W-7 | SOT-363   | 3000/Tape & Reel |
| DRDPB16W-7 | SOT-363   | 3000/Tape & Reel |
| DRDPB26W-7 | SOT-363   | 3000/Tape & Reel |
| DRDN005W-7 | SOT-363   | 3000/Tape & Reel |

Notes: 5. For packaging details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

## Marking Information



RDxx = Product Type Marking Code:

RD01 = DRDN010W  
RD02 = DRDP006W  
RD03 = DRDNB16W  
RD04 = DRDNB26W  
RD05 = DRDPB16W  
RD06 = DRDPB26W  
RD07 = DRDN005W

YM = Date Code Marking

Y = Year ex: S = 2005

M = Month ex: 9 = September

### Date Code Key

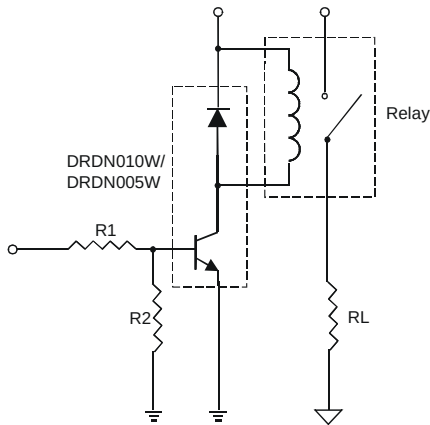
| Year | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|------|------|------|------|------|------|------|------|------|
| Code | S    | T    | U    | V    | W    | X    | Y    | Z    |

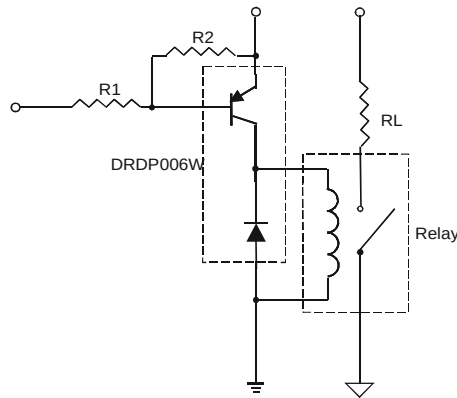
| Month | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Code  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | O   | N   | D   |



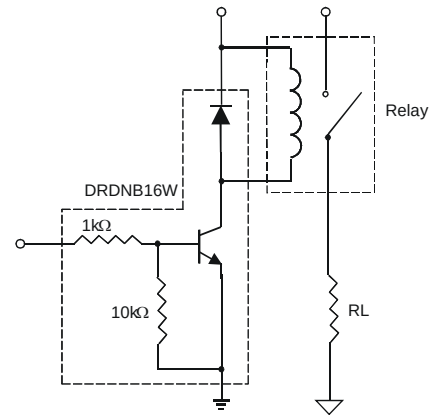
## Sample Applications



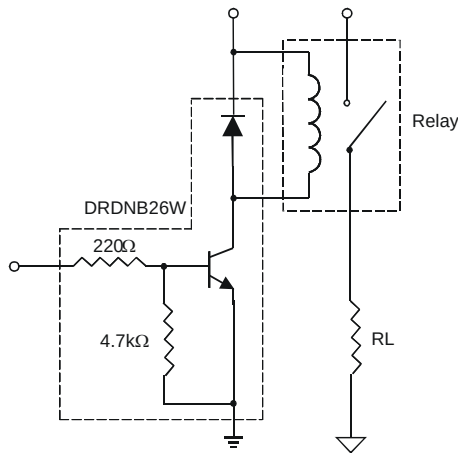
Application Example: DRDN010W/DRDN005W current sink configuration, bias resistors not included



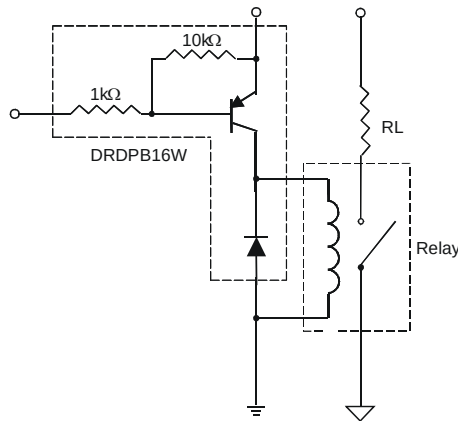
Application Example: DRDP006W current source configuration, bias resistors not included



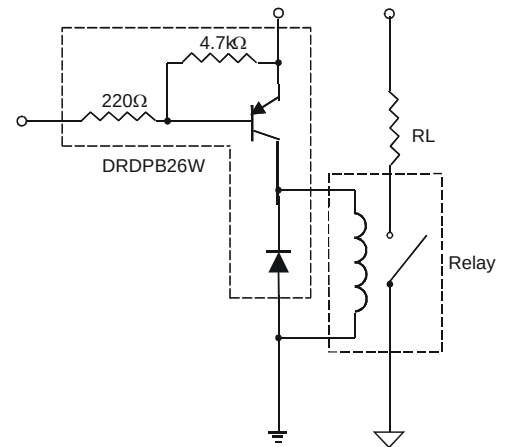
Application Example: DRDNB16W current sink configuration with built-in bias resistors



Application Example: DRDNB26W current sink configuration with built-in bias resistors (low R1)

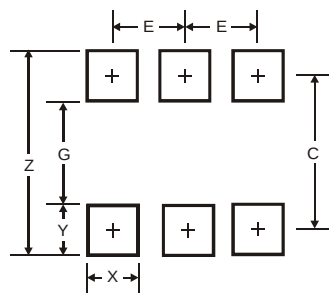


Application Example: DRDPB16W current source configuration with built-in bias resistors



Application Example: DRDPB26W current source configuration with built-in bias resistors (low R1)

## Suggested Pad Layout



| Dimensions | Value (in mm) |
|------------|---------------|
| Z          | 2.5           |
| G          | 1.3           |
| X          | 0.42          |
| Y          | 0.6           |
| C          | 1.9           |
| E          | 0.65          |

### IMPORTANT NOTICE

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. Diodes Incorporated does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

### LIFE SUPPORT

Diodes Incorporated products are not authorized for use as critical components in life support devices or systems without the expressed written approval of the President of Diodes Incorporated.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)

[www.lifeelectronics.ru](http://www.lifeelectronics.ru)