

XBP06V0U25R-G

ETR29023-001

Low Capacitance TVS Diode

FEATURES

Bi-directional	
Terminal Capacitance	: 0.35pF
ESD Protection	: 15kV Contact (IEC61000-4-2)
Environmentally Friendly	: EU RoHS Compliant

APPLICATIONS

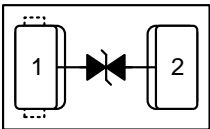
- USB 3.0, HDMI
- DVI
- Portable equipment

PRODUCT NAME

PRODUCT NAME	PACKAGE	ORDER UNIT
XBP06V0U25R-G *	FBP1006-2A	10,000pcs/Reel

* The "-G" suffix denotes Halogen and Antimony free as well as being fully RoHS compliant

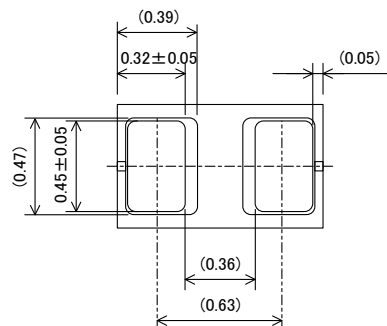
PIN CONFIGURATION



ABSOLUTE MAXIMUM RATINGS

Ta=25°C

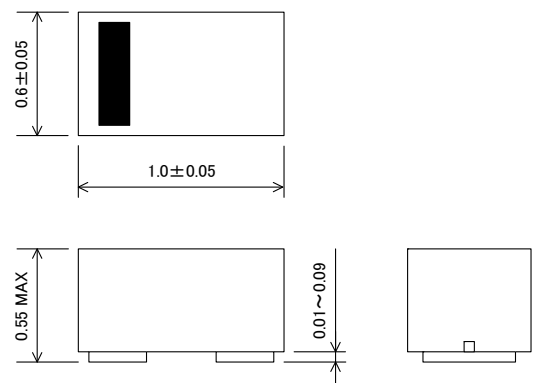
PARAMETER	SYMBOL	RATINGS	UNIT
Peak Pulse Current (8/20 μs Waveform)	I _{pp}	2	A
Junction Temperature	T _j	-55~ 125	°C
Storage Temperature	T _{stg}	-55~ +150	°C
IEC61000-4-2 (ESD) Air	V _{ESD_A}	±15	kV
IEC61000-4-2 (ESD) Contact	V _{ESD_C}	±15	kV



PACKAGING INFORMATION

● FBP1006-2A

Unit : mm



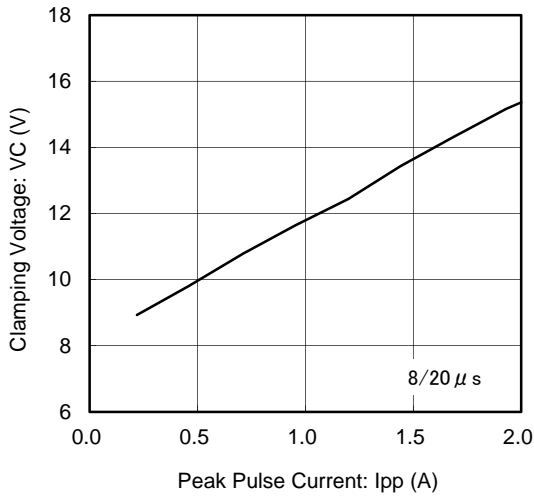
ELECTRICAL CHARACTERISTICS

Ta=25°C

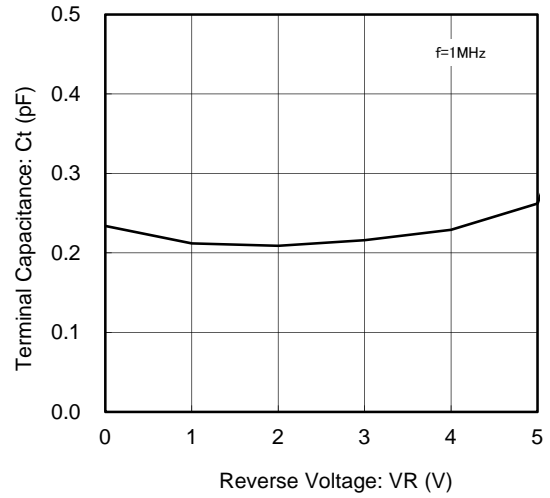
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Stand-Off Voltage	V _{RWM}		-	-	5	V
Breakdown Voltage	V _{BR}	I _R =1mA	6.0	8.4	11.2	V
Leakage Current	I _R	V _R =5V	-	-	1	μA
Clamping Voltage (8/20 μs)	V _C	I _{PP} =1A	-	12.0	14.0	V
Terminal Capacitance	C _t	V _R =0V, f=1MHz	-	0.25	0.35	pF

TYPICAL PERFORMANCE CHARACTERISTICS

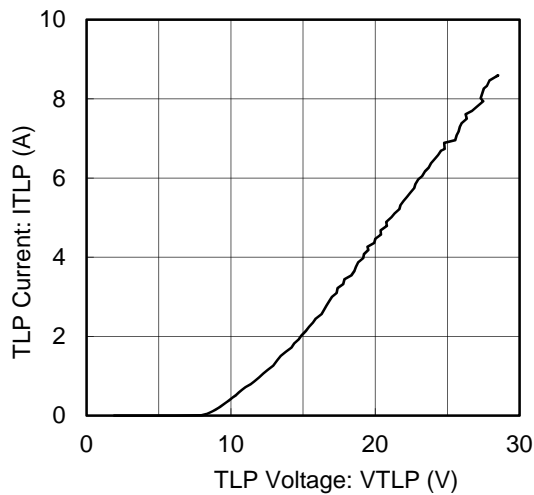
(1) Clamping Voltage vs. Peak Pulse Current



(2) Terminal Capacitance vs. Reverse Voltage



(3) Transmission Line Pulse (TLP) Measurement



NOTES ON USE

1. Please use this IC within the absolute maximum ratings.

Even within the ratings, in case of high load use continuously such as high temperature, high voltage, high current and thermal stress may cause reliability degradation of the IC.

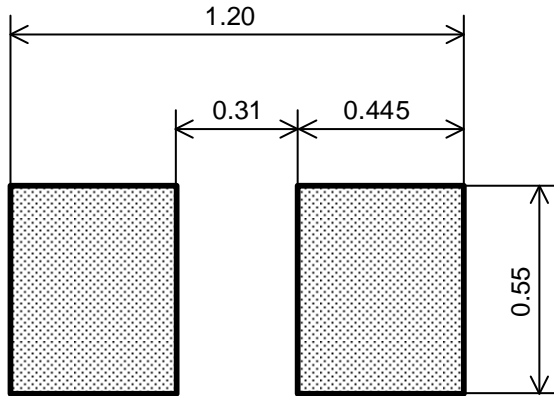
2. Torex places an importance on improving our products and their reliability.

We request that users incorporate fail-safe designs and post-aging protection treatment when using Torex products in their systems.

■ REFERENCE PATTERN LAYOUT

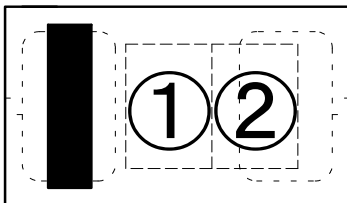
●FBP1006-2A

Unit: mm



■ MARKING RULE

FBP1006-2A



① represents product.

MARK	PRODUCT
A	XBP06V0U25R-G

② represents production lot number

0~9, A~Z repeated

(G, I, J, O, Q, W excluded) *No character inversion used.

1. The product and product specifications contained herein are subject to change without notice to improve performance characteristics. Consult us, or our representatives before use, to confirm that the information in this datasheet is up to date.
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4. The product is neither intended nor warranted for use in equipment of systems which require extremely high levels of quality and/or reliability and/or a malfunction or failure which may cause loss of human life, bodily injury, serious property damage including but not limited to devices or equipment used in 1) nuclear facilities, 2) aerospace industry, 3) medical facilities, 4) automobile industry and other transportation industry and 5) safety devices and safety equipment to control combustions and explosions. Do not use the product for the above use unless agreed by us in writing in advance.
5. Although we make continuous efforts to improve the quality and reliability of our products; nevertheless Semiconductors are likely to fail with a certain probability. So in order to prevent personal injury and/or property damage resulting from such failure, customers are required to incorporate adequate safety measures in their designs, such as system fail safes, redundancy and fire prevention features.
6. Our products are not designed to be Radiation-resistant.
7. Please use the product listed in this datasheet within the specified ranges.
8. We assume no responsibility for damage or loss due to abnormal use.
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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.



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