

# SESDFBP05C

## Single Line ESD Protection Diode

### Description

The SESDFBP05C ESD protection diode is designed to replace multilayer varistors (MLVs) in portable applications such as cell phones, notebook computers, and PDA's. They feature large cross-sectional area junctions for conducting high transient currents, offer desirable electrical characteristics for board level protection, such as fast response time, lower operating voltage, lower clamping voltage and no device degradation when compared to MLVs.

### Applications

- Cellular phones handsets and Accessories
- PDA's
- MP3 players
- Digital cameras
- Portable applications
- mobile telephone

### Features

- Equivalent to 0402 package
- 120W peak pulse power
- Small package for use in portable electronics
- Standoff voltage : 5V
- Low leakage current
- RoHS compliant package

Complies with the following standards

IEC61000-4-2

Level 4 15 kV (air discharge)

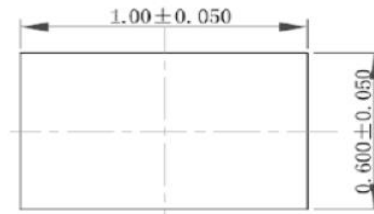
8 kV(contact discharge)

MIL STD 883E - Method 3015-7 Class 3

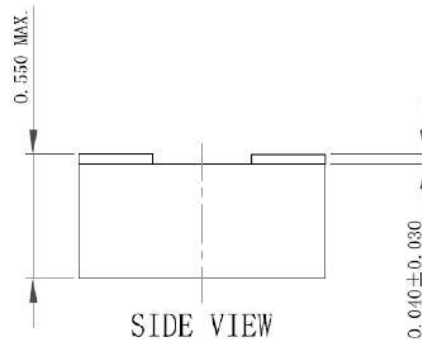
25 kV HBM (Human Body Model)

### Packing & Order Information

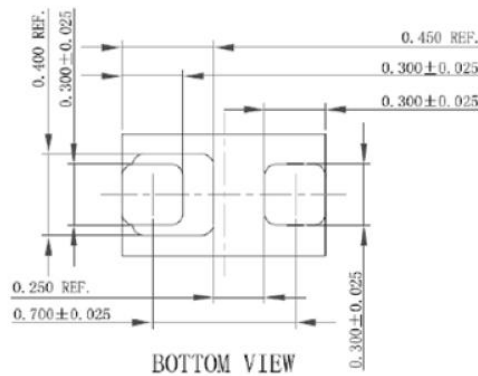
3,000/Reel



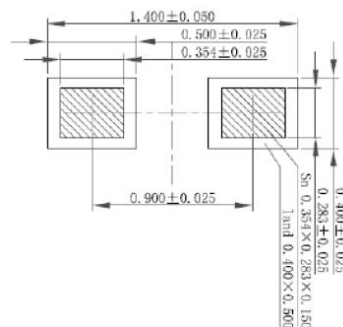
TOP VIEW



SIDE VIEW

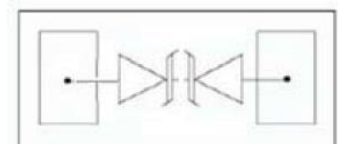
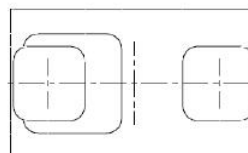


BOTTOM VIEW



**RoHS**  
COMPLIANT

### Graphic symbol



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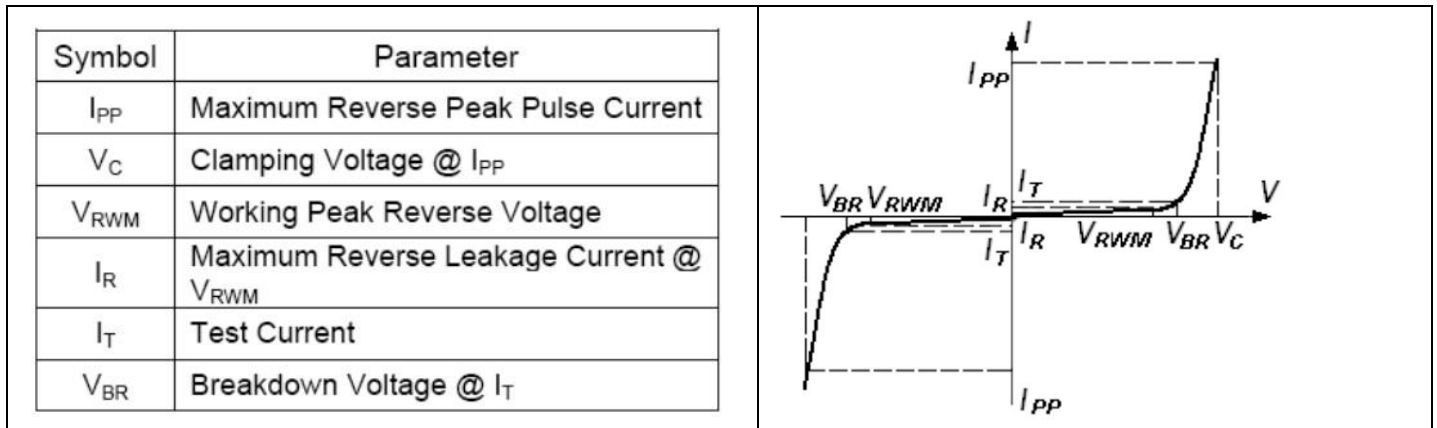
#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Absolute ratings @25°C Unless Otherwise Specified

Symbol	Parameter	Value	Unit
	IEC 61000-4-2 (ESD) Contact	8	Kv
P <sub>PP</sub>	Peak Pulse Power	120	W
I <sub>PP</sub>	Peak Pulse Power	12	A
T <sub>J</sub> ,T <sub>STG</sub>	Junction and Storage Temperature Range	-55 to +150	°C
T <sub>L</sub>	Lead Solder Temperature – Maximum (10 Second Duration)	260	°C

#### Electrical Characteristics

Part Numbers	VBR			I <sub>r</sub>	VRWM	I <sub>R</sub>	C
	Min.	Typ.	Max.				
	V	V	V				
SESDFBP05C	6.1	6.6	7.2	1	5	1	10



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#### ■ Typical Device Characteristics

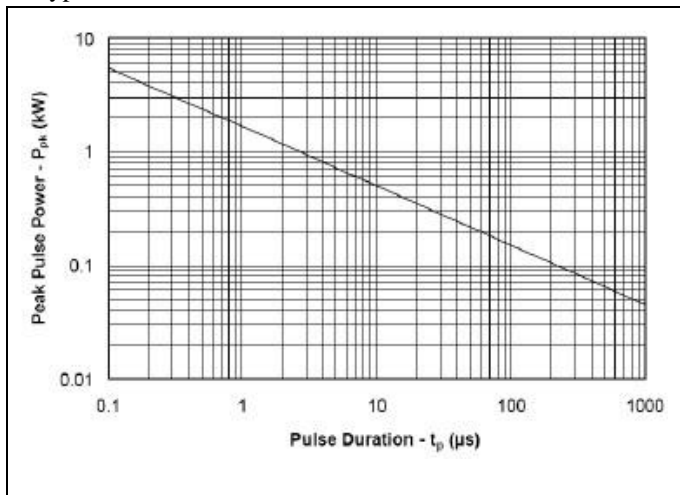


FIG.1- NON-REPETITIVE PEAK PULSE POWER VS. TIME

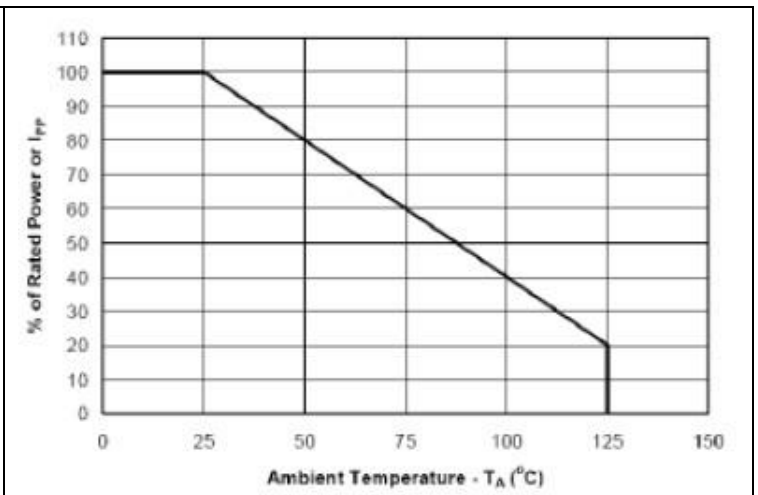


FIG.2- POWER DERATING CURVE

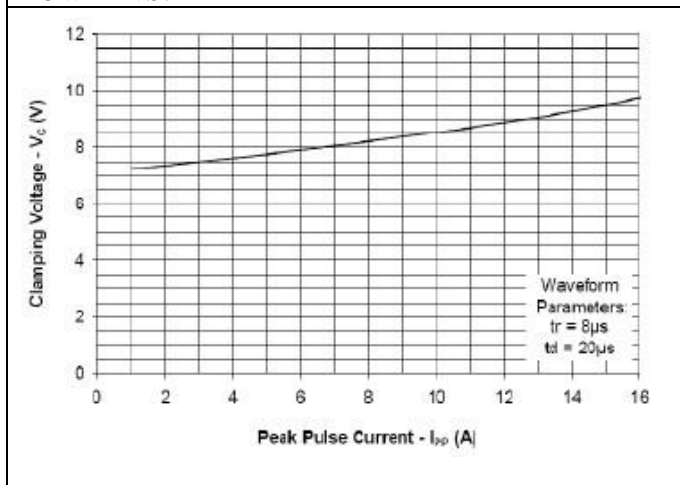


FIG.3- CLAMPING VOLTAGE VS. EAK PULSE CURRENT

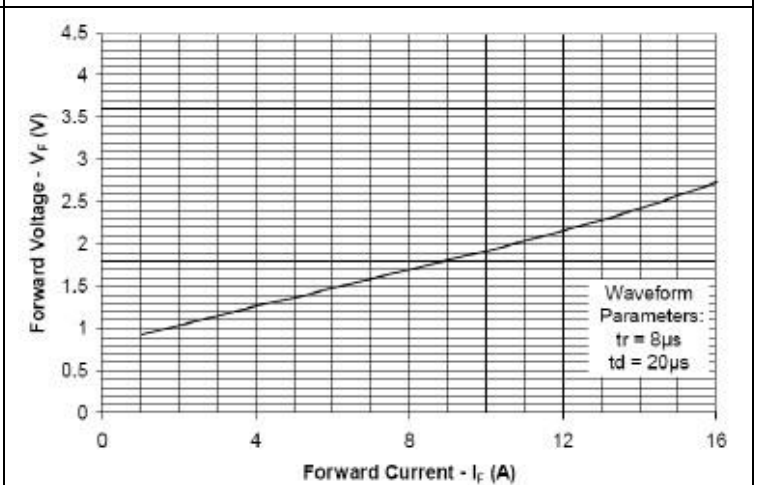


FIG.4- FORWARD VOLTAGE VS. FORWARD CURRENT

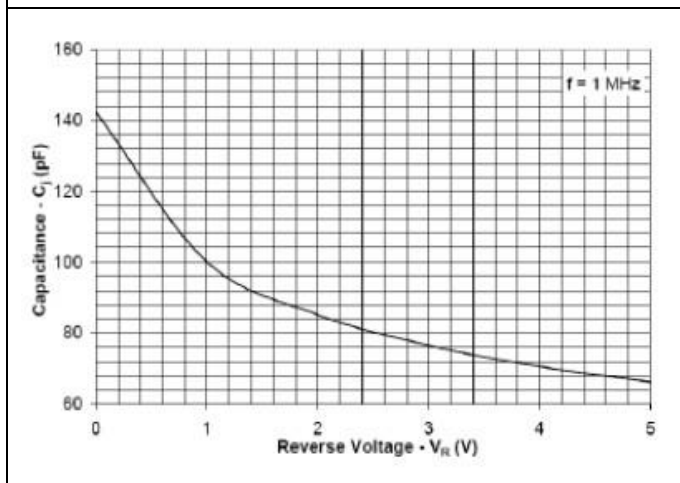


Fig 5- JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

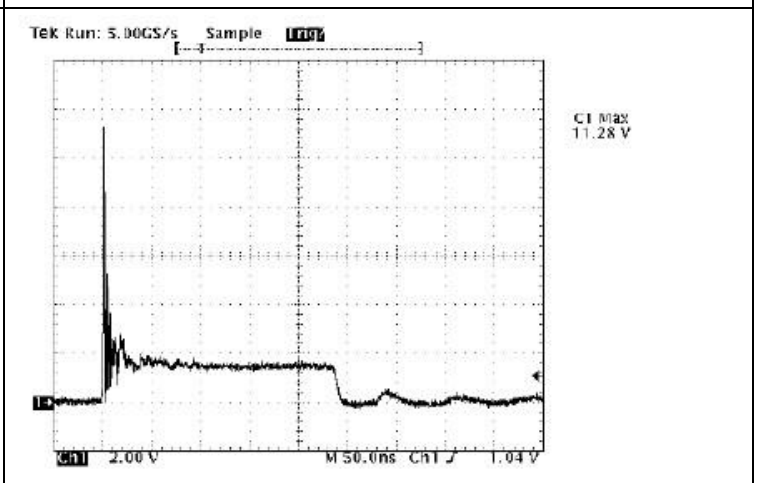


Fig 6- ESD CLAMPING (8KV CONTACT PER IEC 61000-4-2)

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#### Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE

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