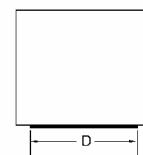
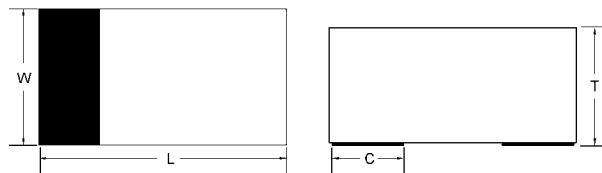




# TESDU5V0 ~ TESDU36V

## SMD ESD Protection Diode

0603

### Features

- ◊ (16kV) ICE61000-4-2 rating.
- ◊ Surface mount package.
- ◊ High Current desity.

### Mechanical Data

- ◊ Cases: 0603 standard package, molded plastic
- ◊ Terminals: Gold plated, solderable per MIL-STD-750, method 2026,
- ◊ Marking Code:
  - TESDU5V0: E05
  - TESDU12V: E12
  - TESDU24V: E24
  - TESDU36V: E36
- ◊ Mounting position: Any
- ◊ Weight: 0.003 gram (approximately)

Item	0603
L	0.071(1.80) 0.063(1.60)
W	0.039(1.00) 0.031(0.80)
T	0.033(0.85) 0.027(0.70)
C	0.018(0.45) Typical
D	0.028(0.70) Typical

Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number		Symbol	Min.	Typ	Max.	Units
Diode Breakdown Voltage	TESDU5V0 TESDU12V IF=1mA TESDU24V TESDU36v	V <sub>BD</sub>	5.1 14 25 38	7.0 17 28 40		V
Leakage Current	TESDU5V0 5V TESDU12V 12V TESDU24V 24V TESDU36V 36V	I <sub>L</sub>		±0.1	±2.0	uA
Capacitance	TESDU5V0 TESDU12V @ 1MHz TESDU24V TESDU36V	C <sub>J</sub>		15 12 10 5	20 — — —	pF
Channel Clamp Voltage	TESDU5V0 TESDU12V 8KV event TESDU24V TESDU36V	V <sub>ESD</sub>			±7.0 ±17 ±25 ±40	V
Peak ESD Voltage Capability	TESDU5V0 TESDU12V IEC6100-4-2 TESDU24V TESDU36V	V <sub>PV</sub>			16	KV
Peak Pulse Current	TESDU5V0 TESDU12V 8 / 20 us TESDU24V TESDU36V	I <sub>PP</sub> *			5.1 15 15 15	A
Package Power	TESDU5V0 TESDU12V TESDU24V TESDU36V	P			100	mW

\* One diode conducting

## RATING AND CHARACTERISTIC CURVES (TESDU5V0 SERIES)

Fig. 1 - 8/20us Peak pulse current waveform acc. IEC 61000-4-5

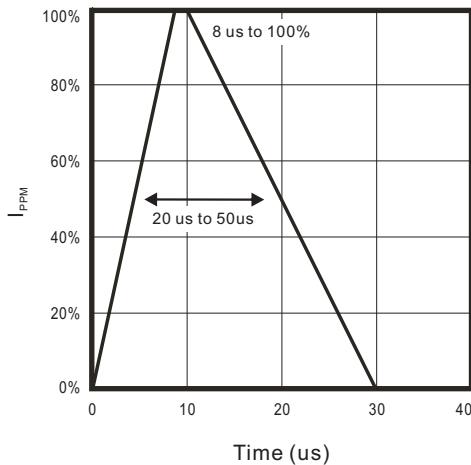


Fig. 2 - Reverse characteristics

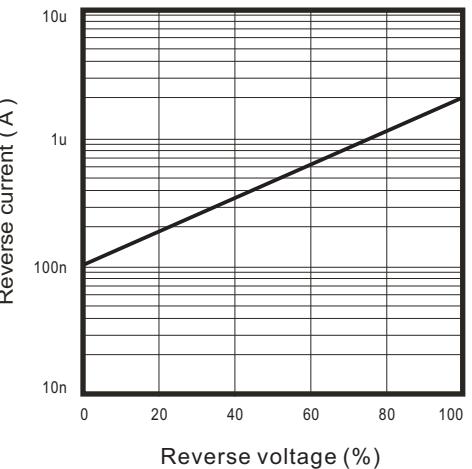


Fig. 3 - Capacitance between terminals characteristics

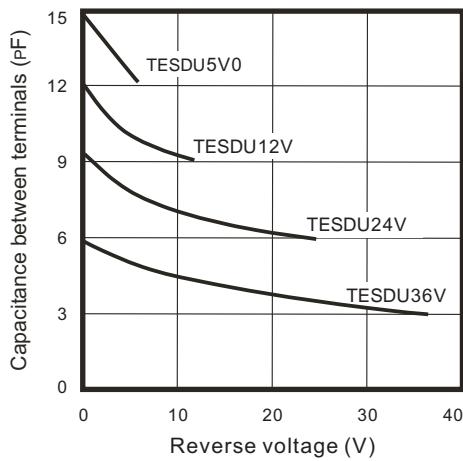


Fig. 4 - Power rating derating curve

