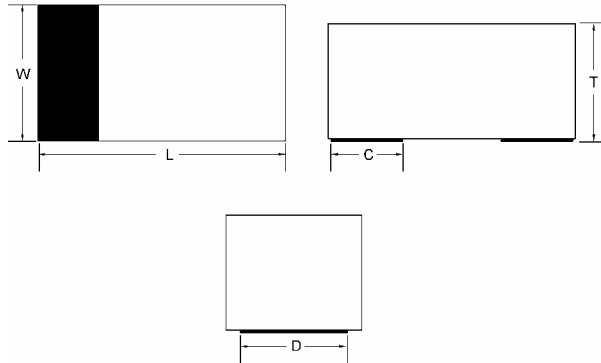




TESDE5V0 ~ TESDE36V

SMD ESD Protection Diode

0503

Features

- ✧ (16kV) ICE61000-4-2 rating.
- ✧ Surface mount package.
- ✧ High Current density.

Mechanical Data

- ✧ Cases: 0503 standard package, molded plastic
- ✧ Terminals: Gold plated, solderable per MIL-STD-750, method 2026,
- ✧ Marking Code:
 - TESDE5V0: E05
 - TESDE12V: E12
 - TESDE24V: E24
 - TESDE36V: E36
- ✧ Mounting position: Any
- ✧ Weight: 0.002 gram (approximately)

Item	0503
L	0.053(1.35) 0.045(1.15)
W	0.034(0.85) 0.026(0.65)
T	0.030(0.75) 0.024(0.60)
C	0.016(0.40) Typical
D	0.022(0.55) 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	TESDE5V0 TESDE12V IF=1mA TESDE24V TESDE36V	V _{BD}	5.1 14 25 38	7.0 17 28 40		V
Leakage Current	TESDE5V0 5V TESDE12V 12V TESDE24V 24V TESDE36V 36V	I _L		±0.1	±2.0	uA
Capacitance	TESDE5V0 TESDE12V @ 1MHz TESDE24V TESDE36V	C _J		15 12 10 5	20 — — —	pF
Channel Clamp Voltage	TESDE5V0 TESDE12V 8KV event TESDE24V TESDE36V	V _{ESD}			±7.0 ±17 ±25 ±40	V
Peak ESD Voltage Capability	TESDE5V0 TESDE12V IEC6100-4-2 TESDE24V TESDE36V	V _{PP}			16	KV
Peak Pulse Current	TESDE5V0 TESDE12V 8 / 20 us TESDE24V TESDE36V	I _{PP} *			5.1 15 15 15	A
Package Power	TESDE5V0 TESDE12V TESDE24V TESDE36V	P			100	mW

* One diode conducting

RATING AND CHARACTERISTIC CURVES (TESDE5V0 SERIES)

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

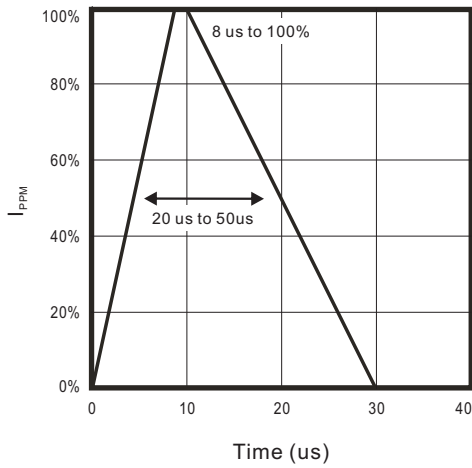


Fig. 2 - Reverse characteristics

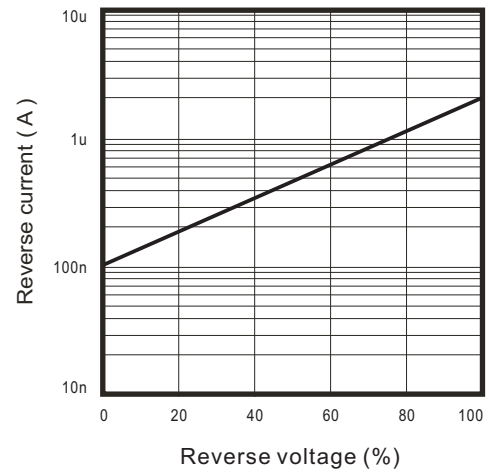


Fig. 3 - Capacitance between terminals characteristics

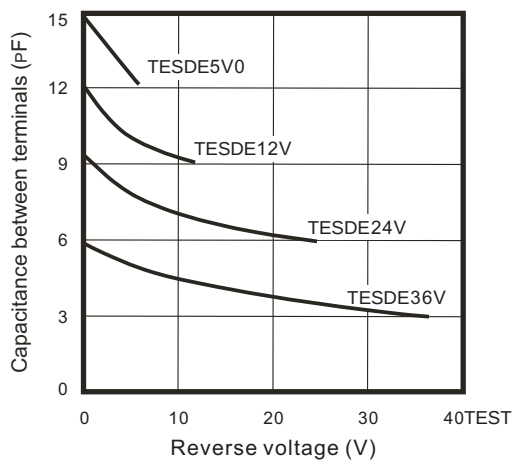


Fig. 4 - Power rating derating curve

