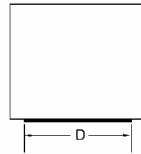
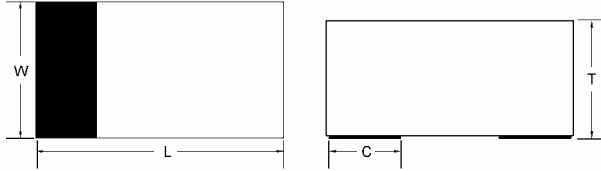
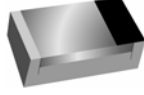




TESDE5V0 ~ TESDE36V

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	V _{BD}	5.1	7.0		V
TESDE5V0		14	17		
TESDE12V IF=1mA		25	28		
TESDE24V		38	40		
Leakage Current	I _L		±0.1	±2.0	uA
TESDE5V0 5V					
TESDE12V 12V					
TESDE24V 24V					
Capacitance	C _J		15	20	pF
TESDE5V0			12	—	
TESDE12V @ 1MHz			10	—	
TESDE24V			5	—	
Channel Clamp Voltage	V _{ESD}			±7.0	V
TESDE5V0				±17	
TESDE12V 8KV event				±25	
TESDE24V				±40	
Peak ESD Voltage Capability	V _{pv}			16	KV
TESDE5V0					
TESDE12V IEC6100-4-2					
TESDE24V					
Peak Pulse Current	I _{pp} *			5.1	A
TESDE5V0				15	
TESDE12V 8 / 20 us				15	
TESDE24V				15	
Package Power	P			100	mW
TESDE5V0					
TESDE12V					
TESDE24V					
TESDE36V					

* One diode conducting

RATING AND CHARACTERISTIC CURVES (TESDE5V0 SERIES)

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

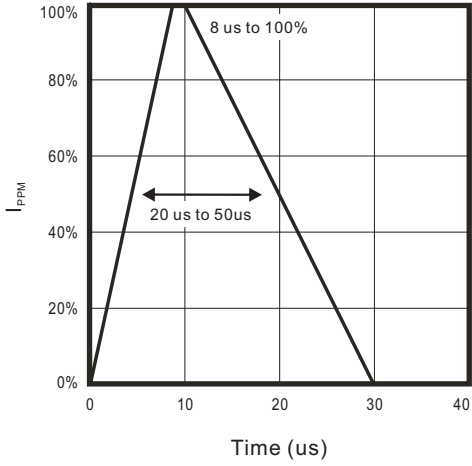


Fig. 2 - Reverse characteristics

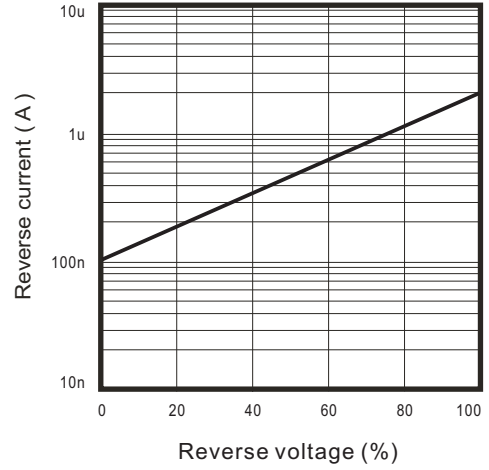


Fig. 3 - Capacitance between terminals characteristics

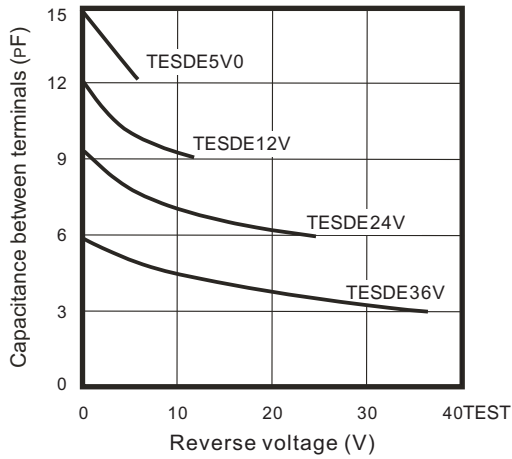


Fig. 4 - Power rating derating curve

