

Preliminary



TESDL5V0 ~ TESDL36V

SMD ESD Protection Diode

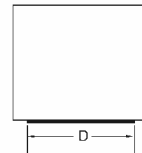
1005

Features

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

Mechanical Data

- ✧ Cases: 1005 standard package, molded plastic
- ✧ Terminals: Gold plated, solderable per MIL-STD-750, method 2026,
- ✧ Marking Code:
TESDL5V0: E05
TESDL12V: E12
TESDL24V: E24
TESDL36V: E36
- ✧ Mounting position: Any
- ✧ Weight: 0.006 gram (approximately)



Item	1005
L	0.102(2.60) 0.095(2.40)
W	0.051(1.30) 0.043(1.10)
T	0.035(0.90) 0.027(0.70)
C	0.020(0.50) Typical
D	0.040(1.00) 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	TESDL5V0 TESDL12V IF=1mA TESDL24V TESDL36V	V _{BD}	5.1 14 25 38	7.0 17 28 40		V
Leakage Current	TESDL5V0 5V TESDL12V 12V TESDL24V 24V TESDL36V 36V	I _L		±0.1	±2.0	uA
Capacitance	TESDL5V0 TESDL12V @ 1MHz TESDL24V TESDL36V	C _J		15 12 10 5	20 — — —	pF
Channel Clamp Voltage	TESDL5V0 TESDL12V 8KV event TESDL24V TESDL36V	V _{ESD}			±7.0 ±17 ±25 ±40	V
Peak ESD Voltage Capability	TESDL5V0 TESDL12V IEC6100-4-2 TESDL24V TESDL36V	V _{PV}			16	KV
Peak Pulse Current	TESDL5V0 TESDL12V 8 / 20 us TESDL24V TESDL36V	I _{PP} *			5.1 15 15 15	A
Package Power	TESDL5V0 TESDL12V TESDL24V TESDL36V	P			100	mW

* One diode conducting

RATINGS AND CHARACTERISTIC CURVES(TESDL5V0 SERIES)

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

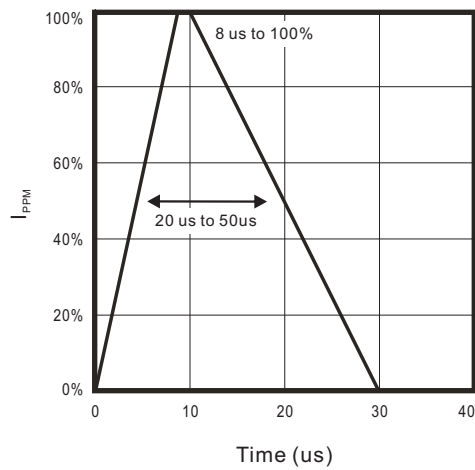


Fig. 2 - Reverse characteristics

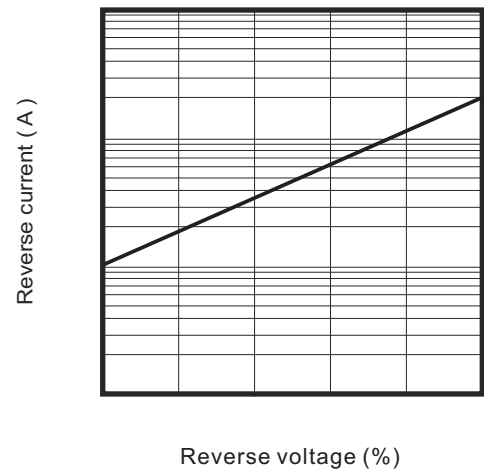


Fig. 3 - Capacitance between terminals characteristics

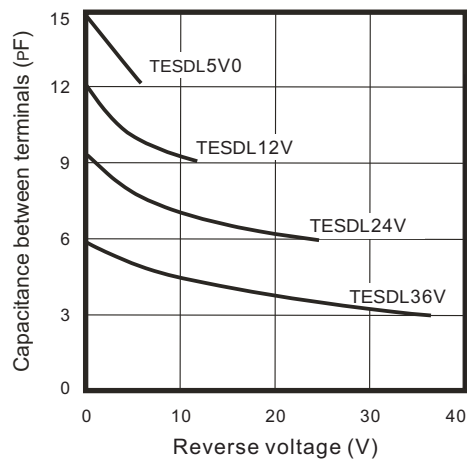


Fig. 4 - Power rating derating curve

