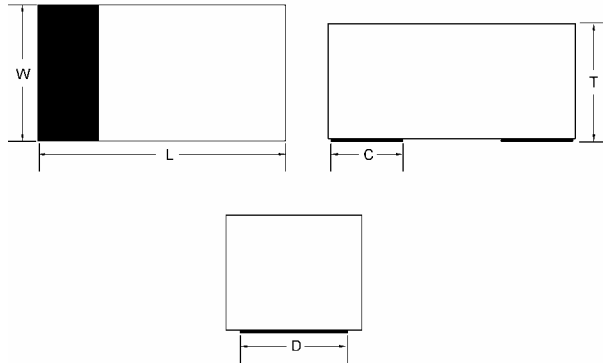




# TESDL5V0 ~ TESDL36V

## 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

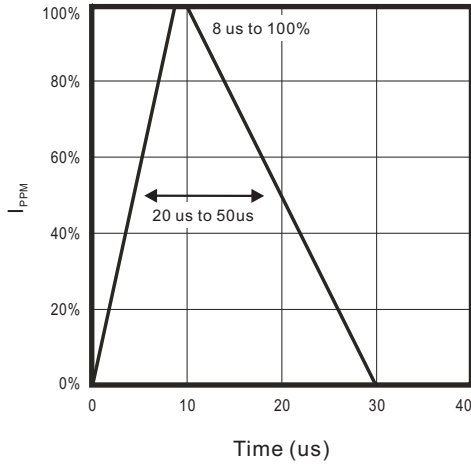
Rating at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Type Number	Symbol	Min.	Typ	Max.	Units
Diode Breakdown Voltage TESDL5V0 TESDL12V IF=1mA TESDL24V TESDL36V	V <sub>BD</sub>	5.1 14 25 38	7.0 17 28 40		V
Leakage Current TESDL5V0 5V TESDL12V 12V TESDL24V 24V TESDL36V 36V	I <sub>L</sub>		±0.1	±2.0	uA
Capacitance TESDL5V0 TESDL12V @ 1MHz TESDL24V TESDL36V	C <sub>J</sub>		15 12 10 5	20 — — —	pF
Channel Clamp Voltage TESDL5V0 TESDL12V 8KV event TESDL24V TESDL36V	V <sub>ESD</sub>			±7.0 ±17 ±25 ±40	V
Peak ESD Voltage Capability TESDL5V0 TESDL12V IEC6100-4-2 TESDL24V TESDL36V	V <sub>pv</sub>			16	KV
Peak Pulse Current TESDL5V0 TESDL12V 8 / 20 us TESDL24V TESDL36V	I <sub>pp</sub> *			5.1 15 15 15	A
Package Power TESDL5V0 TESDL12V TESDL24V TESDL36V	P			100	mW

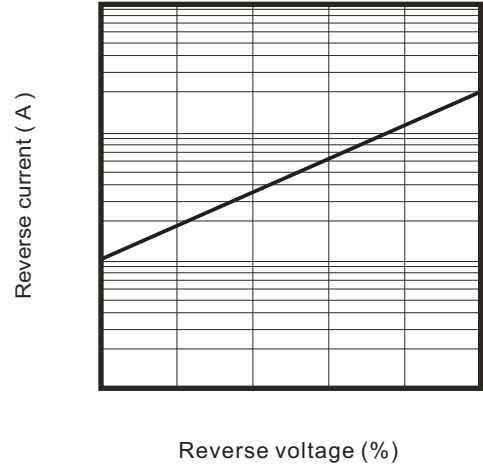
\* One diode conducting

**RATINGS AND CHARACTERISTIC CURVES(TESDL5V0 SERIES)**

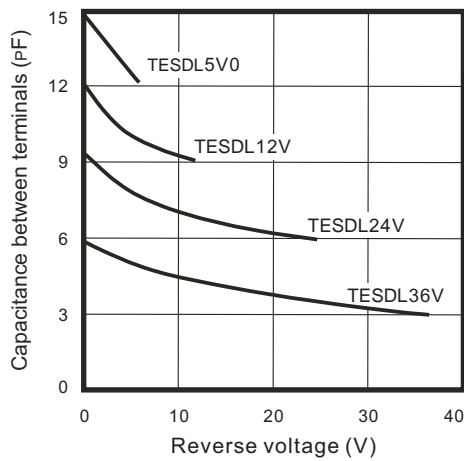
**Fig. 1 - 8/20us Peak pulse current wave form acc. IEC 61000-4-5**



**Fig. 2 - Reverse characteristics**



**Fig. 3 - Capacitance between terminals characteristics**



**Fig. 4 - Power rating derating curve**

