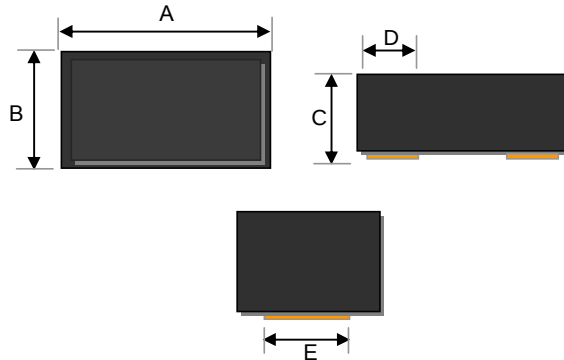
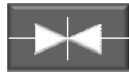


Small Signal Diode

1005


Features

- ✧ Designed for mounting on small surface.
- ✧ (16KV) ICE61000-4-2 rating.
- ✧ Moisture sensitivity level 1
- ✧ Working Voltage : 5V, 12V, 24V
- ✧ Pb free version and RoHS compliant
- ✧ Green compound (Halogen free) with suffix "G" on packing code and prefix "G" on date code

Mechanical Data

- ✧ Case : 1005 standard package, molded plastic
- ✧ Terminal: Gold plated, solder per MIL-STD-750, Method 2026 guaranteed
- ✧ High temperature soldering guaranteed: 250°C/10s
- ✧ Mounting position: Any
- ✧ Weight : 0.006 gram (approximately)

Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.40	2.60	0.095	0.102
B	1.10	1.30	0.043	0.051
C	0.70	0.90	0.027	0.035
D	Typ.	0.50	Typ.	0.020
E	Typ.	1.00	Typ.	0.040

Ordering Information

Part No.	Package	Packing
TESDLxxx RW	1005	4Kpcs / 7" Reel

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	Value	Units
Maximum Power Dissipation	P_D	200	mW
Thermal Resistance (Junction to Ambient) (Note 1)	$R_{\theta JA}$	500	°C/W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to + 150	°C

Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Reverse Breakdown Voltage TESDL5V0 TESDL12V TESDL24V	$V_{(BR)}$	5.1	7	V
		13	17	
		25	28	
Reverse Leakage Current TESDL5V0 TESDL12V TESDL24V	I_R	$V_R=5V$	$I_R=5V$	uA
		$V_R=12V$	$I_R=12V$	
		$V_R=24V$	$I_R=24V$	
Clamping Voltage TESDL5V0 TESDL12V TESDL24V	V_C	$I_{PP}=5A$	15	V
		$I_{PP}=1A$	25	
		$I_{PP}=1A$	47	
Peak Pulse Power TESDL5V0 TESDL12V TESDL24V	P_{PP}	$T_P=8/20us$	75	W
		$T_P=8/20us$	25	
		$T_P=8/20us$	7	
Junction Capacitance TESDL5V0 TESDL12V TESDL24V	C_J	$V_R=0.5V, f=1.0MHz$	15	pF
		$V_R=0.5V, f=1.0MHz$	12	
		$V_R=0.5V, f=1.0MHz$	10	

Notes: 1. Valid provided that electrodes are kept at ambient temperature

Small Signal Diode

Rating and Sharacteristic Curves

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

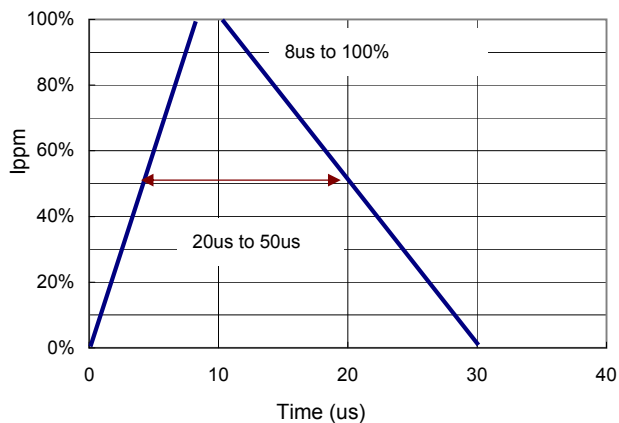


FIG 2 Reverse Characteristics

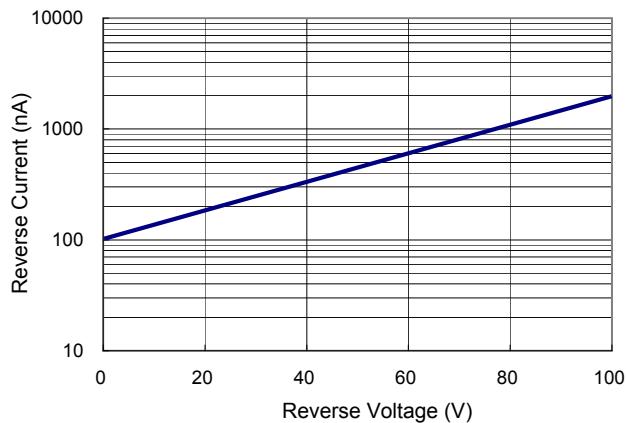


FIG 3 Capacitance between terminals characteristics

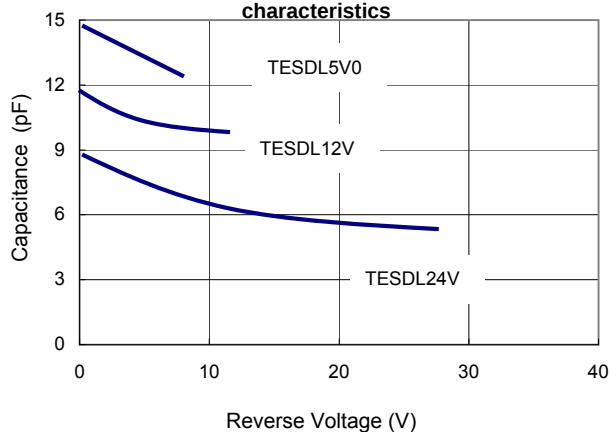


FIG 4 Power rating derating curve

