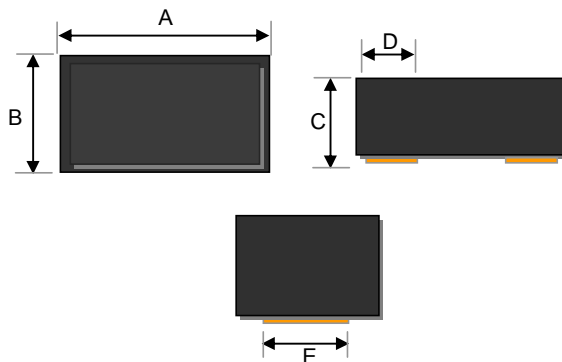


**Small Signal Diode**
**1005**

**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	$I_R$	0.1	2	uA
		$V_R= 5V$		
		$V_R= 12V$ $V_R= 24V$		
Clamping Voltage TESDL5V0 TESDL12V TESDL24V	$V_C$	-	15	V
		-	25	
		-	47	
Peak Pulse Power TESDL5V0 TESDL12V TESDL24V	$P_{PP}$	-	75	W
		-	25	
		-	7	
Junction Capacitance TESDL5V0 TESDL12V TESDL24V	$C_J$	15	20	pF
		12	-	
		10	-	

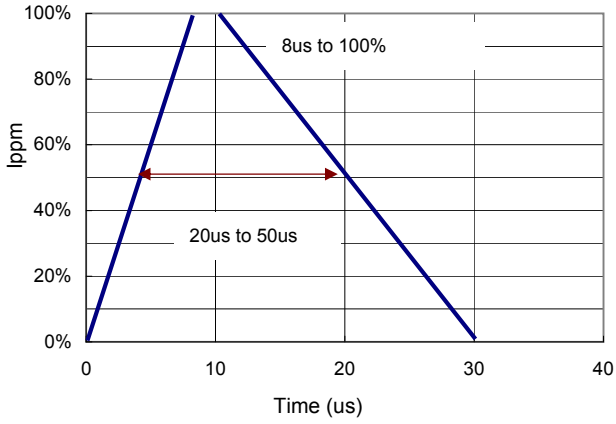
Notes:1. Valid provided that electrodes are kept at ambient temperature



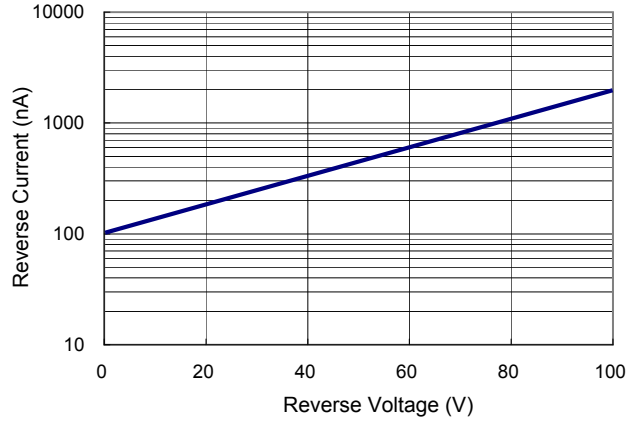
**Small Signal Diode**

**Rating and Sharacteristic Curves**

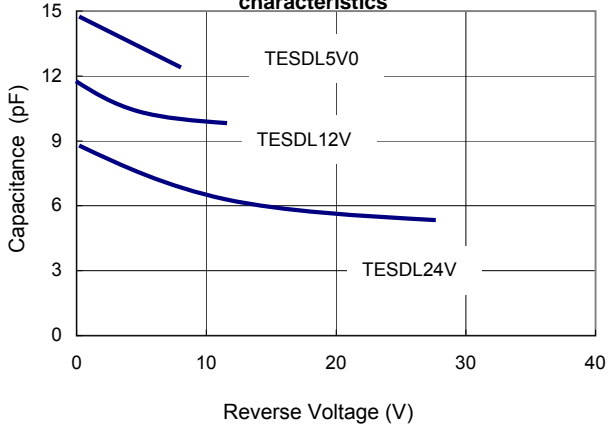
**FIG 1 8/20us Peak pulse current wave from acc.IEC 61000-4-5**



**FIG 2 Reverse Characteristics**



**FIG 3 Capacitance between terminals characteristics**



**FIG 4 Power rating derating curve**

