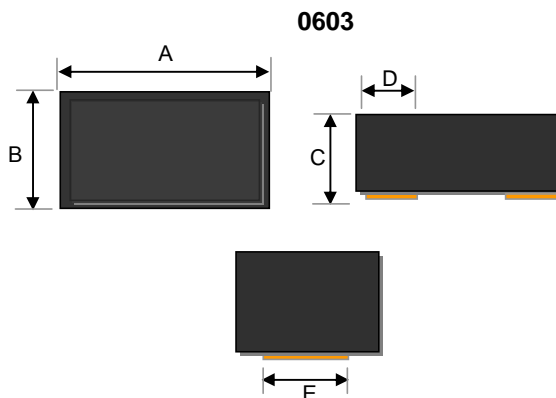


**Small Signal Diode**

**Features**

- ✧ Designed for mounting on small surface.
- ✧ (16KV) IEC61000-4-2 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 : 0603 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 : 0.003 gram (approximately)

Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.60	1.80	0.063	0.071
B	0.80	1.00	0.031	0.039
C	0.70	0.85	0.027	0.033
D	Typ.	0.45	Typ.	0.018
E	Typ.	0.70	Typ.	0.028

**Ordering Information**

Part No.	Package	Packing
TESDUxxx RZ	0603	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	$P_D$	150	mW
Thermal Resistance (Junction to Ambient) (Note 1)	$R_{\theta JA}$	666	°C/W
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to + 150	°C

**Electrical Characteristics**

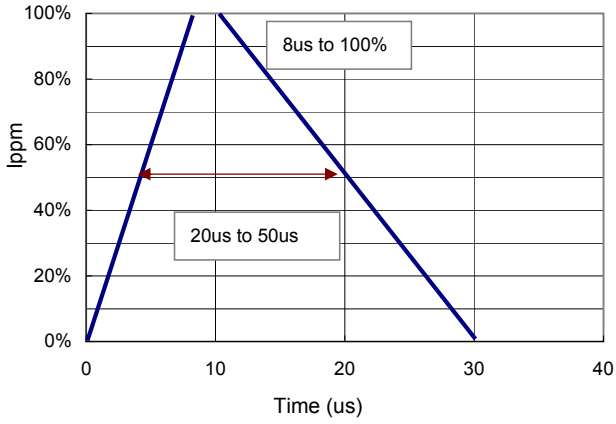
Type Number	Symbol	Min	Max	Units
Reverse Breakdown Voltage TESDU5V0 TESDU12V TESDU24V	$V_{(BR)}$	5.1 13 25	7 17 28	V
Reverse Leakage Current TESDU5V0 TESDU12V TESDU24V	$I_R$	0.1	2	uA
Clamping Voltage TESDU5V0 TESDU12V TESDU24V	$V_C$	- - -	15 25 47	V
Peak Pulse Power TESDU5V0 TESDU12V TESDU24V	$P_{PP}$	- - -	75 25 7	W
Junction Capacitance TESDU5V0 TESDU12V TESDU24V	$C_J$	15 12 10	20 - -	pF

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

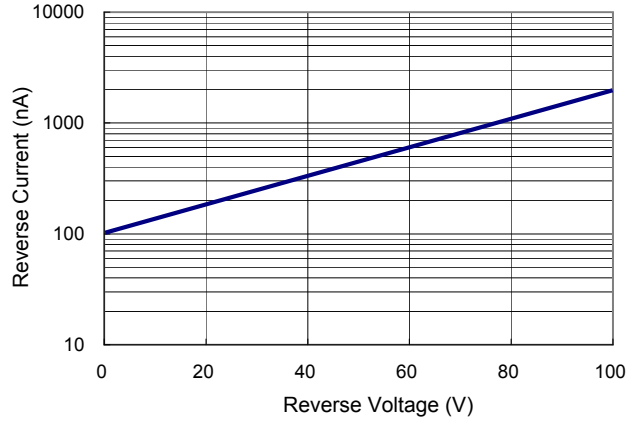
**Small Signal Diode**

**Rating and Sharacteristic Curves**

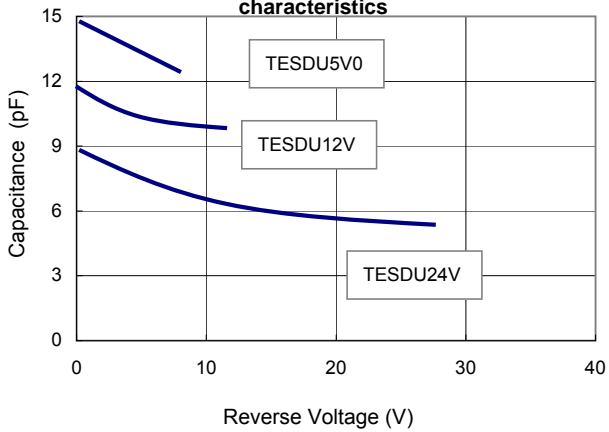
**FIG 1 8/20us Peak pulse current wave from acc.IEC 61000-4-5**



**FIG 2 Reverse Characteristics**



**FIG 3 Capacitance between terminals characteristics**



**FIG 4 Power rating derating curve**

