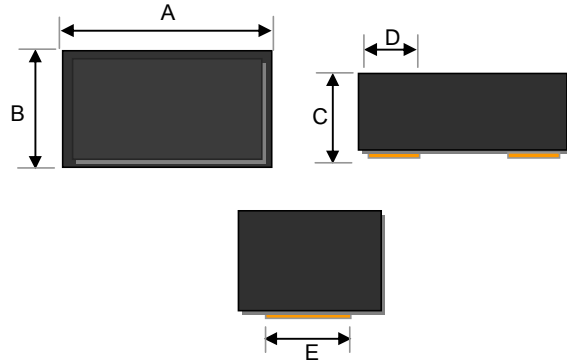
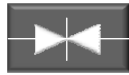


### Small Signal Diode



### 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 : 0503 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 : 0.002 gram (approximately)

Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.15	1.35	0.045	0.053
B	0.65	0.85	0.026	0.033
C	0.60	0.75	0.024	0.030
D	Typ.	0.40	Typ.	0.016
E	Typ.	0.55	Typ.	0.022

### Ordering Information

Part No.	Package	Packing
TESDExxx RZ	0503	5Kpcs / 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

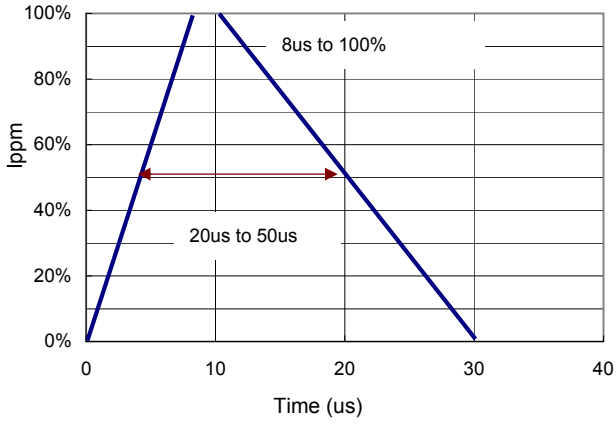
Type Number	Symbol	Min	Max	Units
Reverse Breakdown Voltage TESDE5V0 TESDE12V $I_R=1mA$ TESDE24V	$V_{(BR)}$	5.1	7	V
		13	17	
		25	28	
Reverse Leakage Current TESDE5V0 $V_R=5V$ TESDE12V $V_R=12V$ TESDE24V $V_R=24V$	$I_R$	0.1	2	uA
Clamping Voltage TESDE5V0 $I_{PP}=5A$ TESDE12V $I_{PP}=1A$ TESDE24V $I_{PP}=1A$	$V_C$	-	15	V
		-	25	
		-	47	
Peak Pulse Power TESDE5V0 TESDE12V $T_P=8/20us$ TESDE24V	$P_{PP}$	-	75	W
		-	25	
		-	7	
Junction Capacitance TESDE5V0 TESDE12V $V_R=0.5V, f=1.0MHz$ TESDE24V	$C_J$	15	20	pF
		12	-	
		10	-	

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

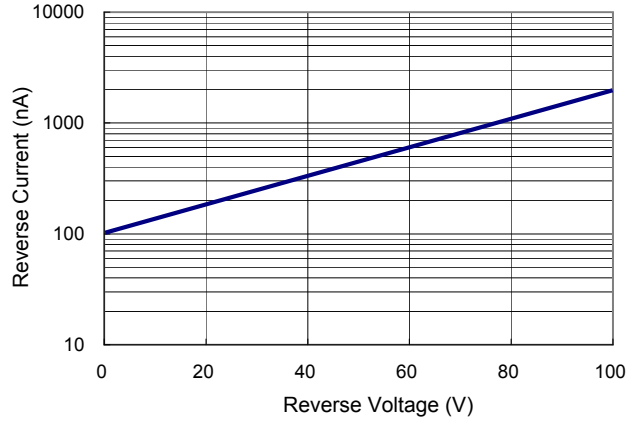
**Small Signal Diode**

**Rating and Sharacteristic Curves**

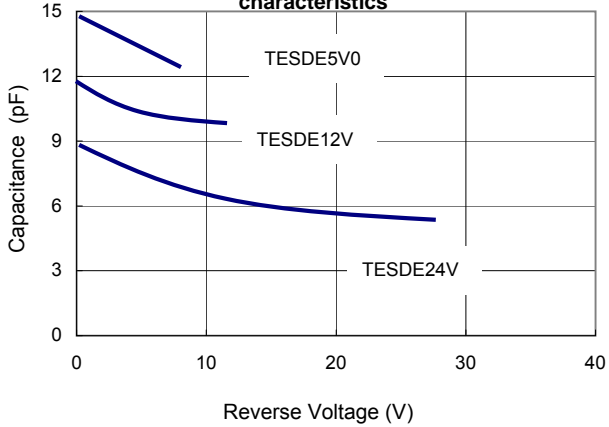
**FIG 1 8/20us Peak pulse current wave from acc.IEC 61000-4-5**



**FIG 2 Reverse Characteristics**



**FIG 3 Capacitance between terminals characteristics**



**FIG 4 Power rating derating curve**

