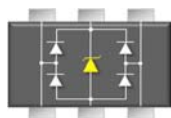
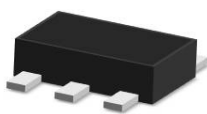
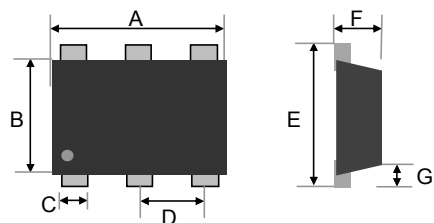


### Small Signal Diode



**SOT-563**



### Features

- ◇ IEC61000-4-2 rating. ±16KV(Air), ±8KV(Contact)
- ◇ Protect two I/O lines and power line
- ◇ Low leakage, Low Operating and Clamping Voltage
- ◇ Low capacitance (<0.9pF) for high-speed interfaces
- ◇ 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 : SOT-563 package, molded plastic
- ◇ Terminal: Matte tin plated, lead free, solderable per MIL-STD-202, Method 202 guaranteed
- ◇ High temperature soldering guaranteed: 260°C/10s
- ◇ Weight: 0.003 gram (approx.)
- ◇ Marking Code : 2A

Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.50	1.70	0.059	0.067
B	1.10	1.30	0.043	0.051
C	0.17	0.27	0.007	0.011
D	0.50 BSC		0.02 BSC	
E	1.50	1.70	0.059	0.067
F	0.50	0.60	0.020	0.024

### Applications

- ◇ Cellular Handsets & Accessories
- ◇ Cordless Phones
- ◇ Monitors and Flat Panel Displays
- ◇ Digital Cameras
- ◇ MP3 Players

### Ordering Information

Part No.	Package code	Package	Packing	Marking
TESDG5V0A	RFG	SOT-563	3K / 7" Reel	2A

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

#### Maximum Ratings

Type Number	Symbol	Value	Units
Peak Pulse Power (tp = 8/20µs)	P <sub>PP</sub>	50	W
Peak Pulse Current (tp = 8/20µs)	I <sub>PP</sub>	3	A
Reverse Peak Pulse Current (tp = 8/20µs)	I <sub>PPR</sub>	1	µA
ESD per IEC 61000-4-2 (Air)	V <sub>ESD</sub>	±15	V
ESD per IEC 61000-4-2 (Contact)		±8	
Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150	°C

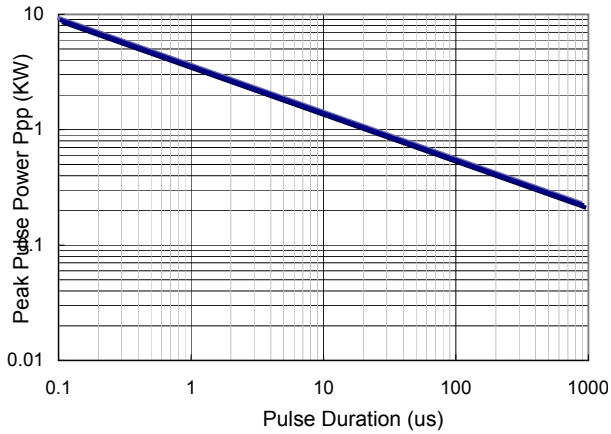
#### Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Working Voltage	V <sub>RWM</sub>	-	5	V
Reverse Breakdown Voltage	V <sub>(BR)</sub>	6	-	V
Reverse Leakage Current	I <sub>R</sub>	-	1	µA
Clamping Voltage	V <sub>C</sub>	-	9.8 16.0	V
Junction Capacitance	C <sub>J</sub>	0.9(Typ.)		pF

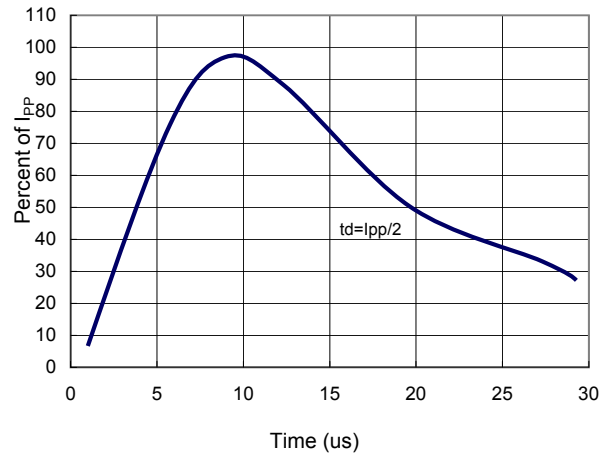
**Small Signal Diode**

**Rating and Sharacteristic Curves**

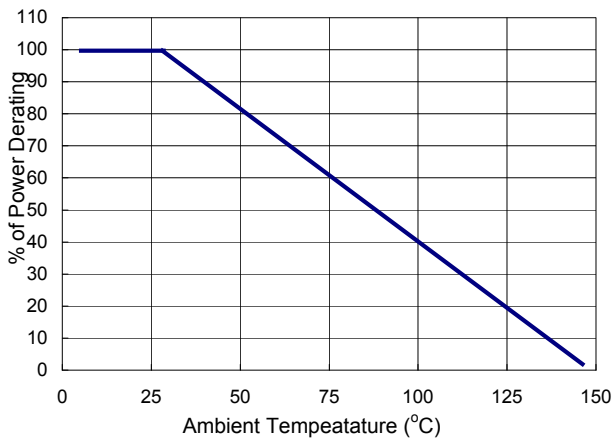
**FIG 1 Non-Repetitive Peak Pulse Power vs. Pulse**



**FIG 2 Pulse Waveform**



**FIG 3 Admissible Power Dissipation Curve**



**FIG 4 Typical Junction Capacitance**

