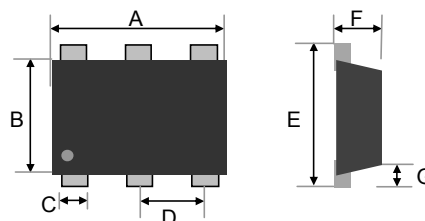


Small Signal Diode



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 _{PP}	50	W
Peak Pulse Current (tp = 8/20µs)	I _{PP}	3	A
Reverse Peak Pulse Current (tp = 8/20µs)	I _{PPR}	1	µA
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±15	V
ESD per IEC 61000-4-2 (Contact)		±8	
Junction and Storage Temperature Range	T _J , T _{STG}	-55 to + 150	°C

Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Working Voltage	V _{RWM}	-	5	V
Reverse Breakdown Voltage	V _(BR)	6	-	V
Reverse Leakage Current	I _R	-	1	µA
Clamping Voltage	V _C	-	9.8 16.0	V
Junction Capacitance	C _J	0.9(Typ.)		pF

Small Signal Diode

Rating and Sharacteristic Curves

FIG 1 Non-Repetitive Peak Pulse Power vs. Pulse

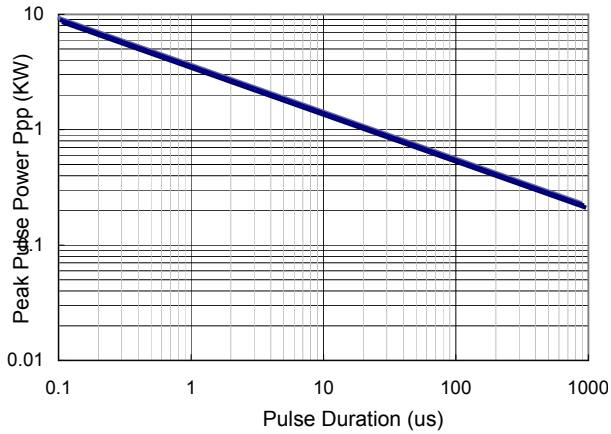


FIG 2 Pulse Waveform

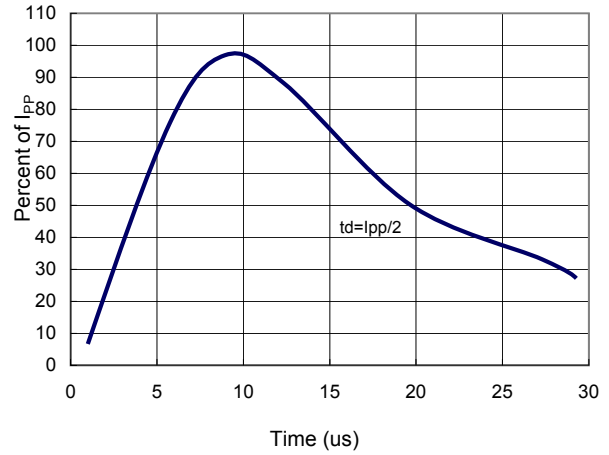


FIG 3 Admissible Power Dissipation Curve

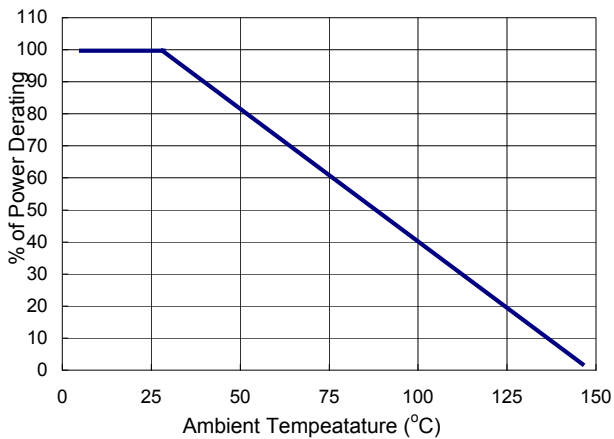


FIG 4 Typical Junction Capacitance

