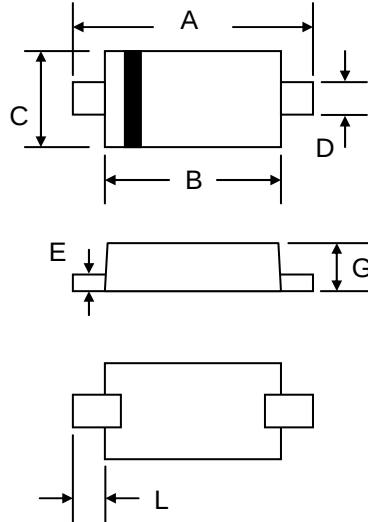


Features

- Low Turn-On Voltage
- Fast Switching Speed
- PN Junction Guard Ring for Transient and ESD Protection
- For General Purpose Switching Applications
- Plastic Material – UL Recognition Flammability Classification 94V-0



SOD-523		
Dim	Min	Max
A	1.50	1.70
B	1.10	1.30
C	0.70	0.90
D	0.30 Typical	
E	0.10 Typical	
G	0.50	0.70
L	0.15	0.25
All Dimensions in mm		

Mechanical Data

- Case: SOD-523, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.002 grams (approx.)
- Marking: S3
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	45	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	40	V
Maximum Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	100	mA
Non-Repetitive Peak Forward Surge Current @ t = 10ms	I _{FSM}	1.0	A
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +125	°C

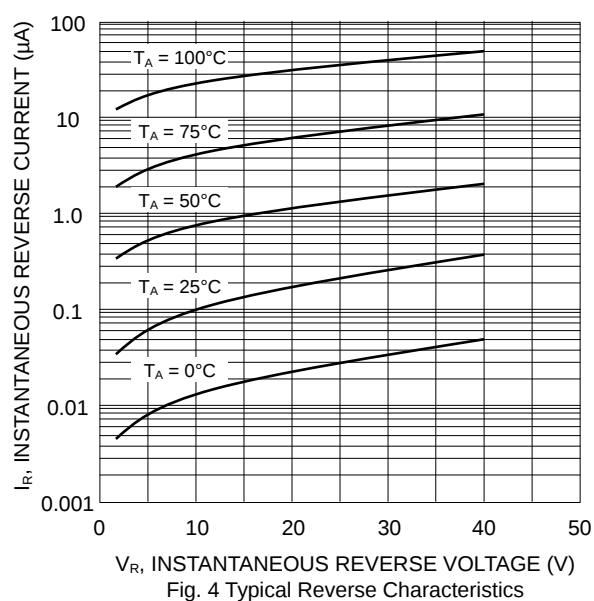
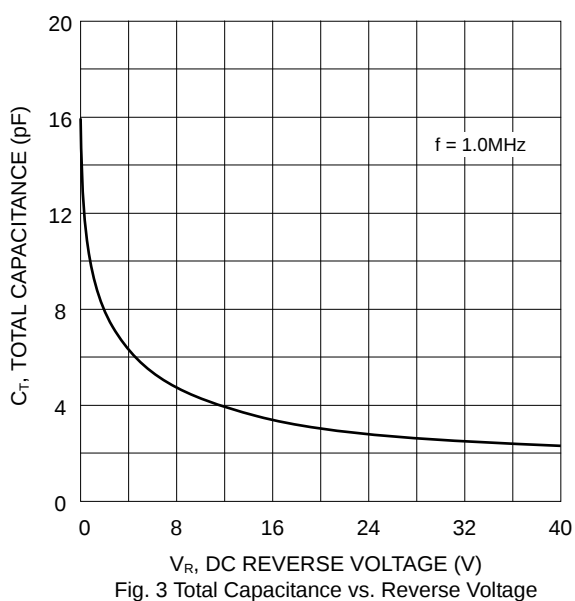
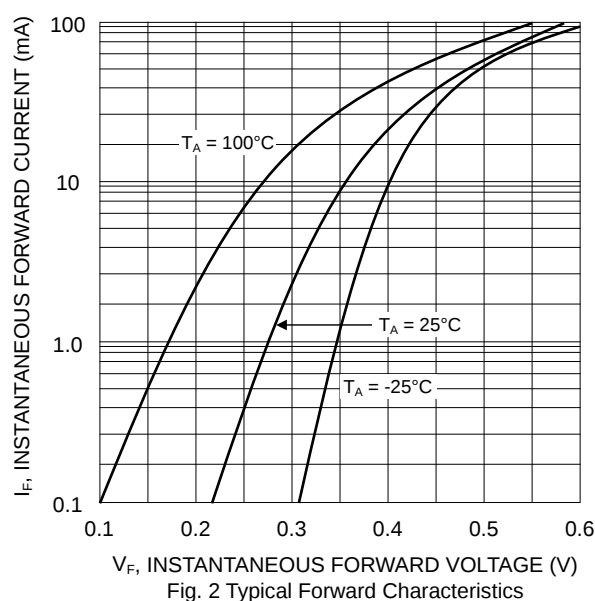
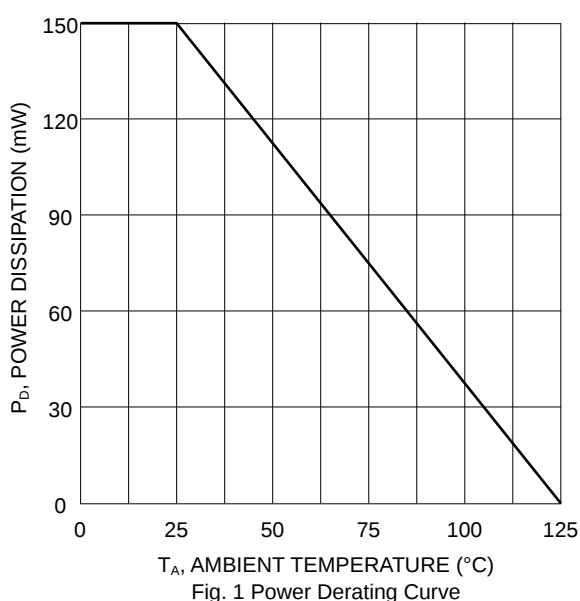
Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	P _D	150	mW

Note: 1. Mounted on FR-4 PC board with minimum recommended pad layout.

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage Drop @ I _F = 1.0mA @ I _F = 10mA @ I _F = 50mA	V _F		0.28 0.36 0.54	— — 0.60	V
Reverse Leakage Current @ V _R = 10V	I _R			5.0	μA
Diode Capacitance (V _R = 0V, f = 1.0MHz)	C _D		18	25	pF

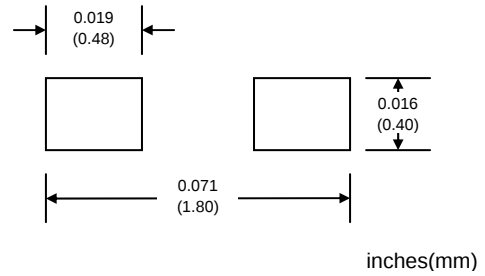


MARKING INFORMATION



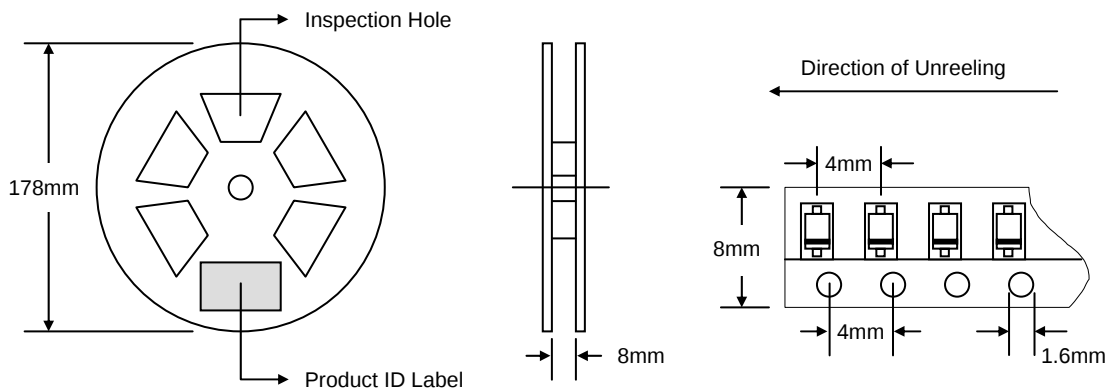
Cathode = Polarity Band
S3 = Device Code

RECOMMENDED FOOTPRINT



PACKAGING INFORMATION

TAPE & REEL



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
178	3,000	187 x 187 x 65	15,000	390 x 240 x 420	150,000	7.0

Note: 1. Anti-static plastic reel, white, water clear or blue color. Inspection hole might be varied in different alignment.
2. Components are packed in accordance with EIA standard 481-1 and 481-2.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
1SS388-T1	SOD-523	3000/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, 1SS388-T1-LF.**

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