

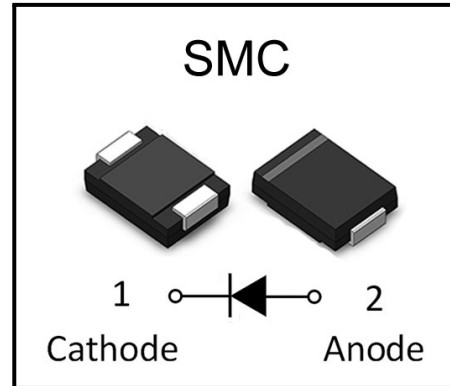
GS3A-GS3M

Rectifier Diode

Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C

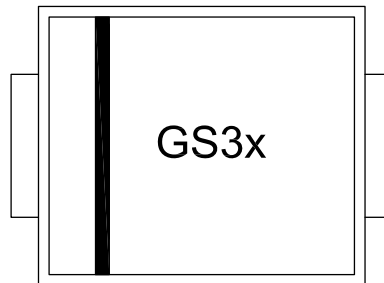
Package



Description

- Package: DO-214AB (SMC)
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color band denotes the cathode end

Making Code



Ordering information

Part Number	GS3A	GS3B	GS3D	GS3G	GS3J	GS3K	GS3M
Marking	GS3A	GS3B	GS3D	GS3G	GS3J	GS3K	GS3M
Base qty	3K	3K	3K	3K	3K	3K	3K



GS3A-GS3M

Rectifier Diode

Maximum Ratings and Electrical Characteristics@T_A=25°C unless otherwise noted

Symbol	Parameters	GS3A	GS3B	GS3D	GS3G	GS3J	GS3K	GS3M	Units
V _{RRM}	Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
V _{RMS}	Maximum RMS Voltage	35	70	140	280	420	560	700	V
V _{DC}	Maximum DC Blocking Voltage	50	100	300	400	600	800	1000	V
I _{AV}	Maximum Average Forward Rectified Current	3.0							A
I _{FSM}	Forward Surge Current@60Hz Half-sine wave, 1 cycle, T _j =25°C	100							A
	Forward Surge Current@1ms, quare wave, 1 cycle, T _j =25°C	200							
V _F	Maximum Forward Voltage@I _{FM} =3.0A	1.1							V
I _R	Maximum DC reverse current@T _j =25°C	5							uA
	Maximum DC reverse current@T _j =125°C	100							
I ² t	Current squared time@1ms≤t≤8.3ms T _j =25°C	41.5							A ² s
C _j	Typical junction capacitance Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	25							pF
R _{θJA} ⁽¹⁾	Typical Thermal Resistance	48							°C/W
T _J	Operating Junction Temperature Range	-55 to +150							°C
T _{STG}	Storage Temperature Range	-55 to +150							°C

Note:(1)Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas



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Typical Performance Characteristics ($T_J = 25^\circ\text{C}$, unless otherwise noted)

Figure 1: $I_{AV}-T_L$ Curve

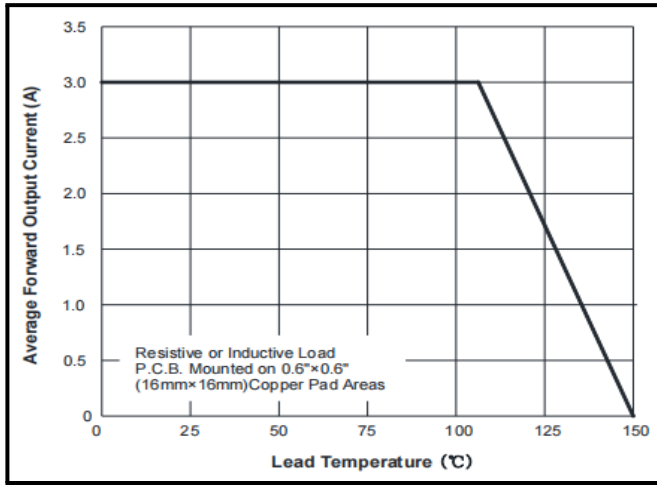


Figure 2: Surge Forward Current Capability

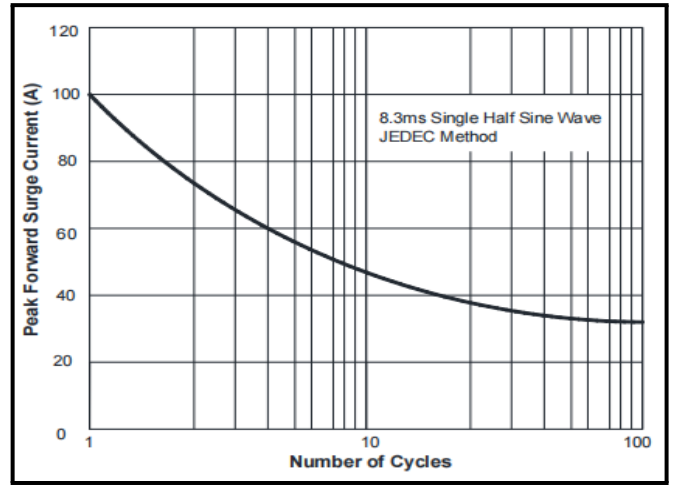


Figure 3: Typical Forward Voltage

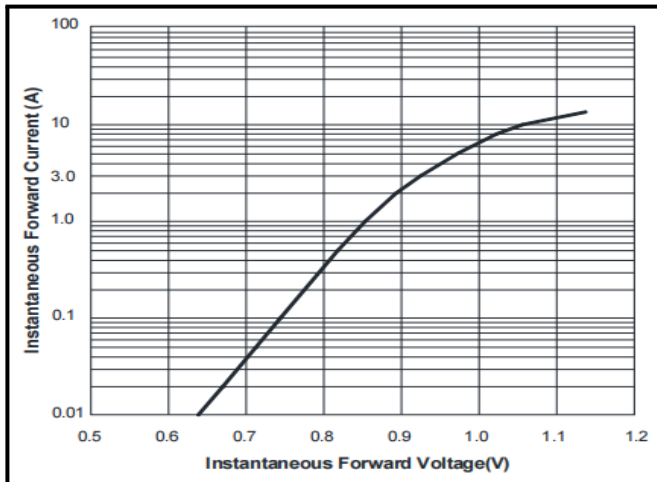
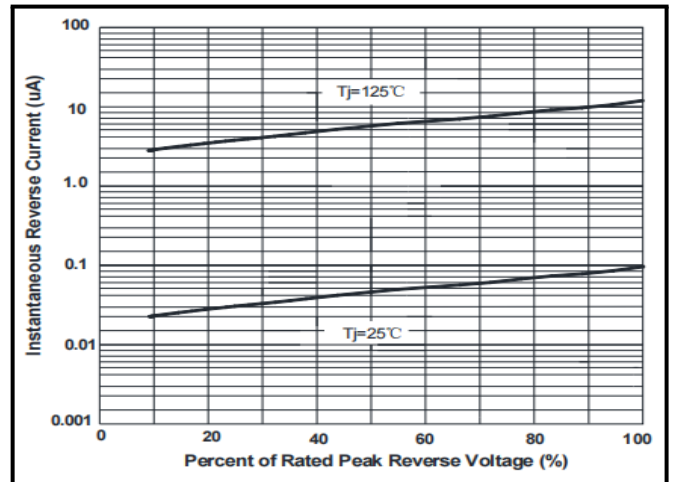


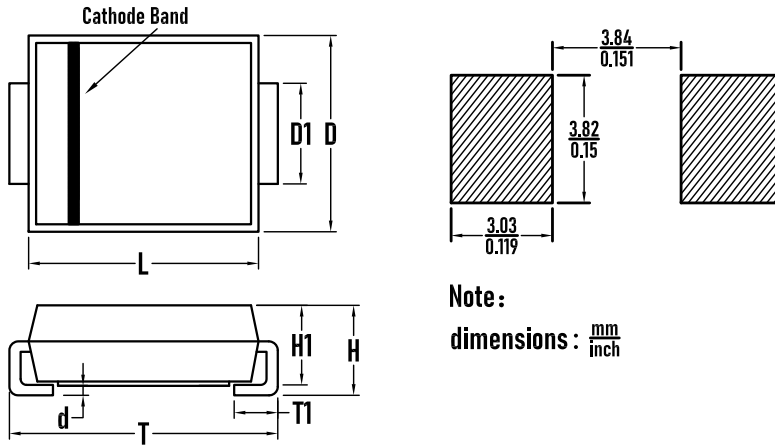
Figure 4: Typical Reverse Characteristics



GS3A-GS3M

Rectifier Diode

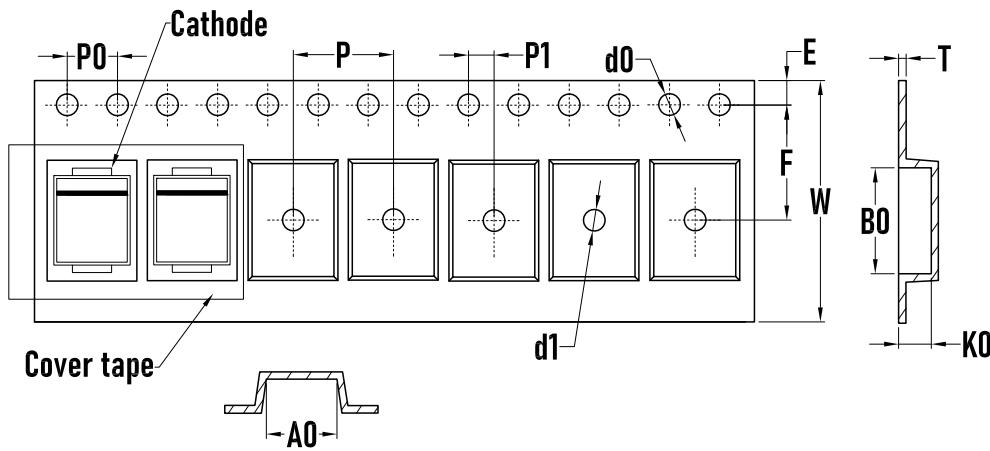
Package Mechanical Data - SMC



Note:
dimensions: $\frac{\text{mm}}{\text{inch}}$

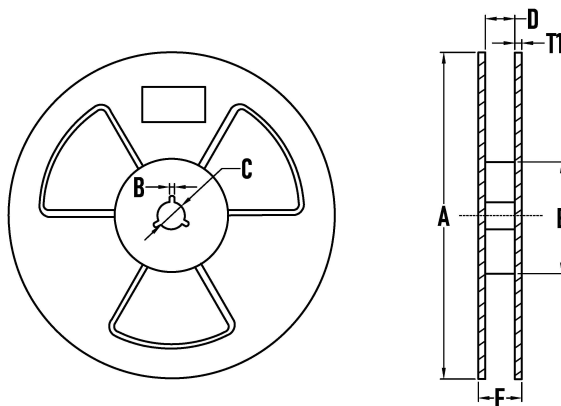
SYMBOL	MILLIMETER	
	MIN	MAX
D	5.75	6.15
D1	2.70	3.30
T	7.65	8.25
T1	0.90	1.50
d	-	0.3
H1	2.07	2.47
H	2.20	2.60
L	6.70	7.10

Packaging Tape - SMC



SYMBOL	MILLIMETER
A0	6.00±0.1
B0	8.25±0.02
d0	1.50±0.1
d1	1.50±0.1
E	1.75±0.1
F	7.50±0.1
K0	2.70±0.1
P	8.00±0.1
P0	4.00±0.1
P1	2.00±0.05
W	16.00±0.1
T	0.22±0.02

Packaging Reel



SYMBOL	MILLIMETER
A	323±2
B	3.0±0.2
C	15.0±0.5
D	16±2
E	73±2
T1	2.2±0.2
Quantity	3000PCS

