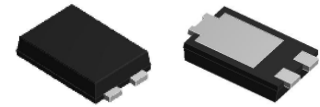
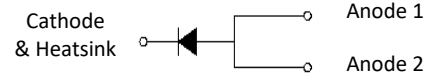


Features

- Heatsink design
- Schottky barrier diodes
- Low forward voltage drop
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260°C, 10s
- Low profile - typical height of 1.1 mm
- High temperature soldering guaranteed: 260°C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition



TO-277B



Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Values	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Maximum RMS Voltage	V _{RMS}	70	V
Maximum DC Blocking Voltage	V _{DC}	100	V
Maximum Average Forward Rectified Current (Figure. 5)	I _{F(AV)} ¹	20.0	A
	I _{F(AV)} ²	10.0	
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load	I _{FSM}	250	A
Operating Junction Temperature Range	T _J	-55 To +150	°C
Storage Temperature Range	T _{STG}	-55 To +150	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Test Conditions	Symbol	Typ.	Max.	Unit
Instantaneous Forward Voltage	I _F =2A, T _A =25°C	V _F	0.42	-	V
	I _F =20A, T _A =25°C		0.62	0.75	
Instantaneous Reverse Current at Rated DC Blocking Voltage	V _R =100V, T _A =25°C	I _R	-	250	uA
	V _R =100V, T _A =100°C		-	30	mA
Typical Junction Capacitance	4.0V, 1 MHz	C _J	1.8		nF
Typical Thermal Resistance	Junction to Ambient	R _{θJA} ³	75		°C/W
	Junction to Mount	R _{θJM} ⁴	1		

Note:

3. Thermal resistance R_{θJA} is junction to ambient. Free air, mounted on P.C.B with recommended copper pad area, 2OZ, FR4.

4. Thermal resistance R_{θJM} is junction to mount. Mounted on P.C.B with 30*30mm copper pad area.

Ratings and Characteristics Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

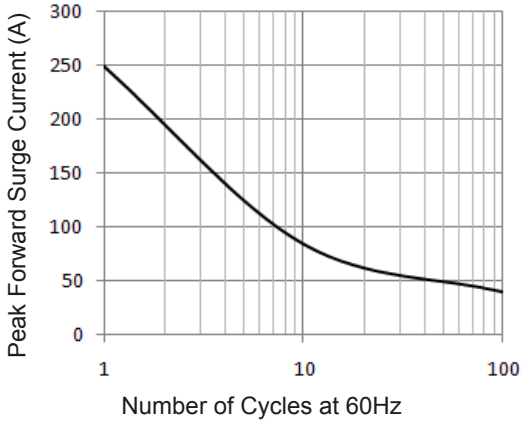


Figure 1. Maximum Non-Repetitive Peak Forward Surge Current

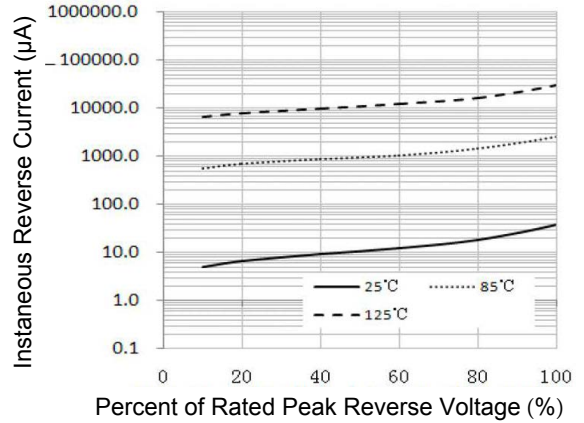


Figure 2. Typical Reverse Characteristics

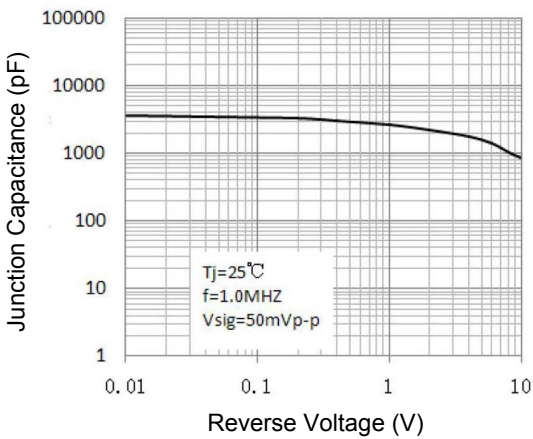


Figure 3. Typical Junction Capacitance

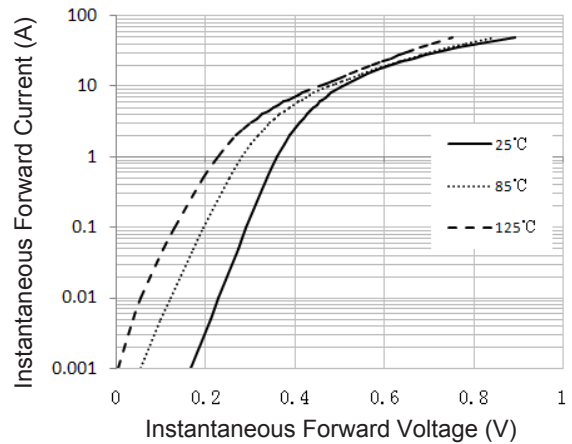


Figure 4. Typical Instantaneous Forward Characteristics

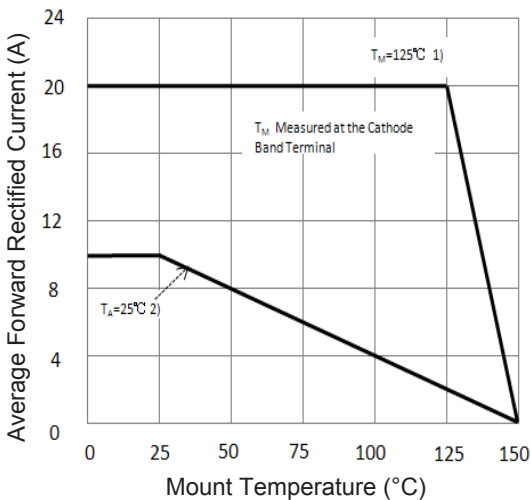
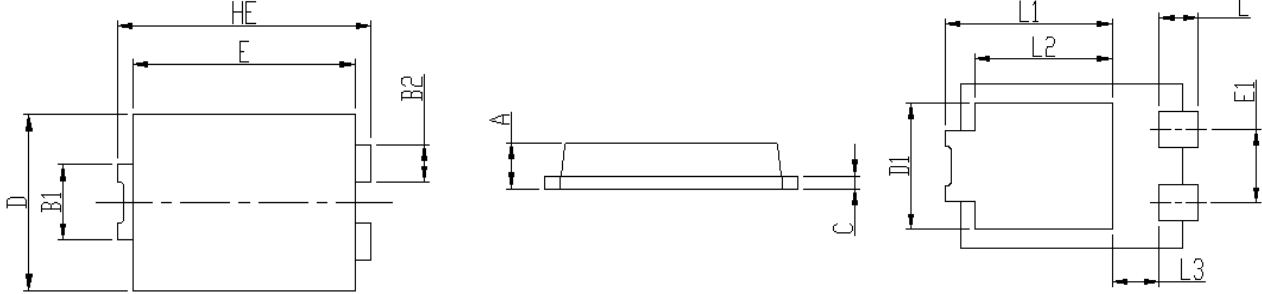


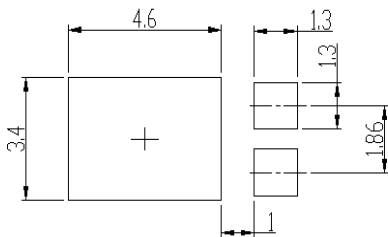
Figure 5. Forward Current Derating Curve

Package Outline Dimensions (TO-277B)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
HE	6.400	6.600	0.252	0.260
E	5.600	5.800	0.220	0.228
D	4.100	4.300	0.161	0.169
B1	1.700	1.900	0.067	0.075
B2	0.800	1.000	0.031	0.039
A	1.050	1.200	0.041	0.047
C	0.250	0.400	0.010	0.016
L	0.850	1.100	0.033	0.043
L1	4.200	4.400	0.165	0.173
L2	3.520 TYP		0.139 TYP	
L3	1.100	1.400	0.043	0.055
D1	3.000	3.300	0.118	0.130
E1	1.860 TYP		0.073 TYP	

Recommended Pad Layout



Unit: mm

Order Information

MPN	Package	Marking	Quantity	HSF Status
GSGC201BS	TO-277B	201BS	5,000pcs / Reel	RoHS Compliant