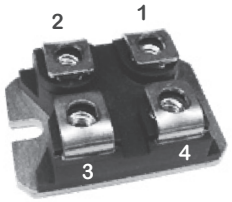
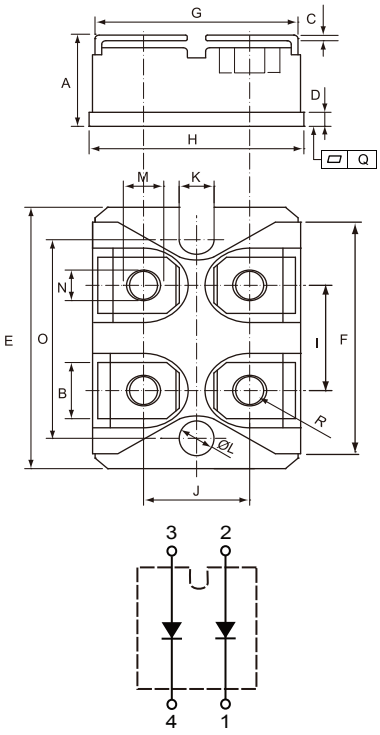
SCHOTTKY DIODE MODULE TYPE
2X80A / 100V

SOT-227





Features

- High Surge Capability
- Type 100V V_{RRM}
- Isolation Type Package
- Electrically Isolation Base Plate
- RoHS Compliant

Maximum Ratings

Junction Operating Temperature : -40°C to +150°C

Storage Temperature : -40°C to +150°C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GSXD080A010S1-D3	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward (Per pkg) Current (Per diode)	$I_{F(AV)}$	160A 80A	T_C =110°C
Peak Forward Surge Current (Per diode)	I_{FSM}	900A	8.3ms, half sine
Maximum (Per diode) Instantaneous Forward Voltage*	V_F	0.75V 0.84V	I_{FM} =80A;T_J =125°C I_{FM} =80A;T_J =25°C
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per diode)	I_R	1mA 10mA 30mA	T_J =25°C T_J =100°C T_J =150°C
Non-Repetitive (Per diode) Avalanche Energy	E_{AS}	1733mJ	T_J =25°C, I_{AS} =52A, L =1mH
Isolation Voltage	V_{iso}	2500V	A.C. 1 minute
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.60°C/W	
Mounting Torque		1.3Nm	M4 Screw

*Pulse Test: Pulse Width 300 μsec, Duty Cycle < 2%

DIMENSIONS				
	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.460	0.483	11.68	12.28
B	0.307	0.323	7.80	8.20
C	0.030	0.033	0.75	0.85
D	0.071	0.081	1.80	2.05
E	1.488	1.504	37.80	38.20
F	1.248	1.260	31.70	32.00
G	0.917	0.957	23.30	24.30
H	0.996	1.008	25.30	25.60
I	0.579	0.602	14.70	15.30
J	0.492	0.516	12.50	13.10
K	0.161	0.169	4.10	4.30
L	0.161	0.169	4.10	4.30
M	0.181	0.197	4.60	5.00
N	0.165	0.181	4.20	4.60
O	1.181	1.197	30.00	30.40
Q	-0.002	0.004	-0.05	0.10
R	M4*8			

Figure.1 - Typical Forward Characteristics

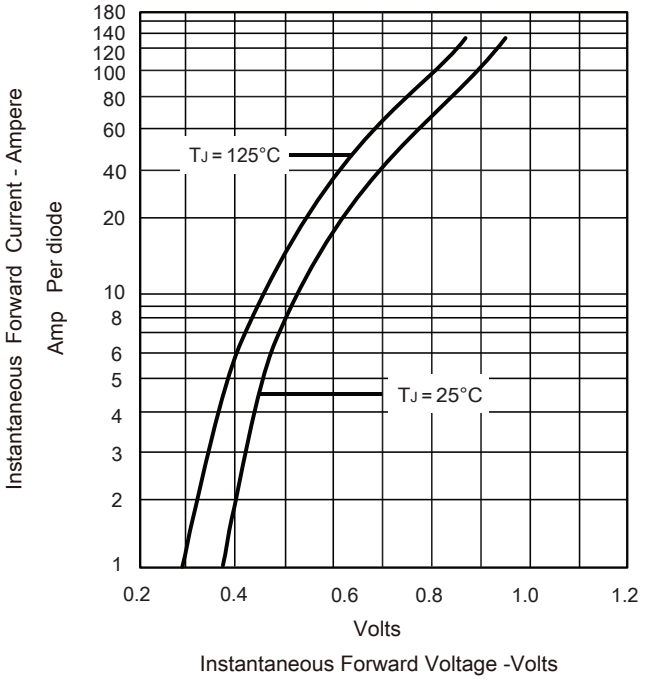


Figure.2 - Forward Derating Curve

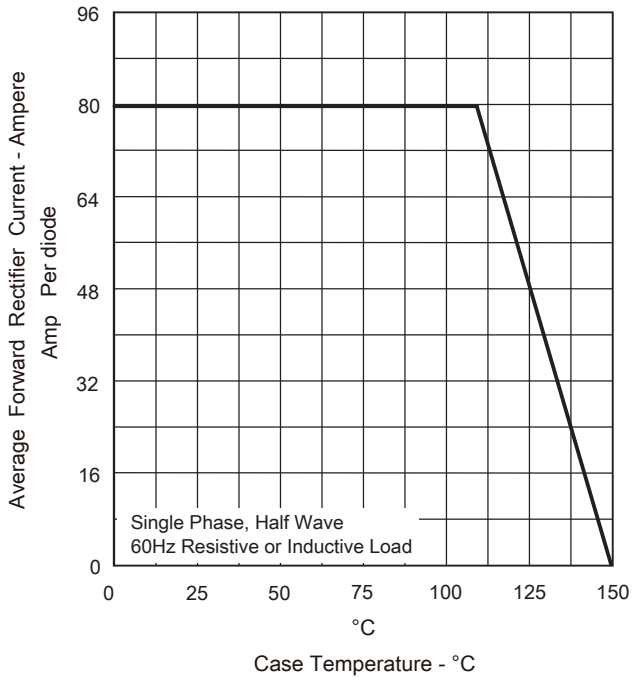


Figure.3 - Peak Forward Surge Current

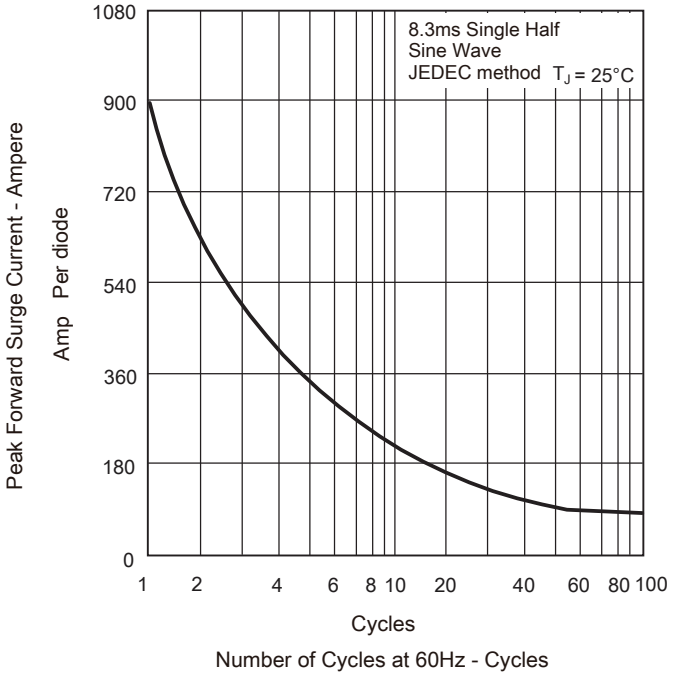
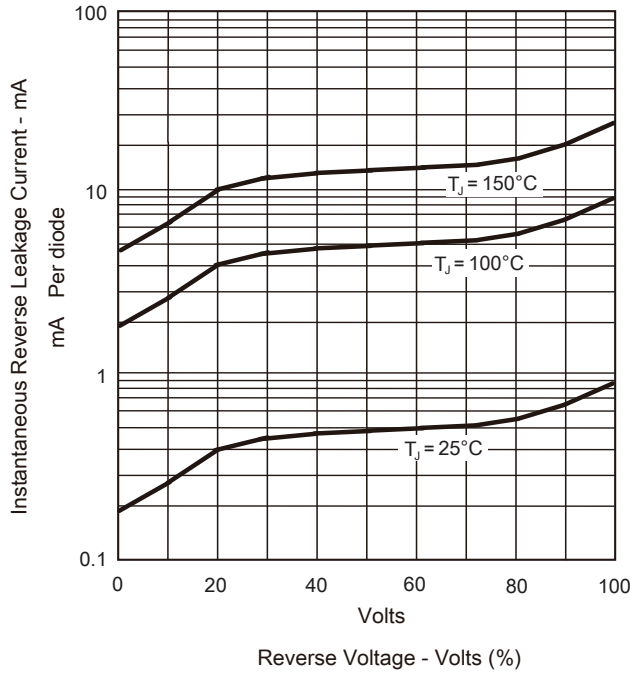


Figure.4 - Typical Reverse Characteristics



Revision History

Date	Revision	Notes
8/10/2014	1.0	Initial release
01/03/2020	1.1	Applied company name change
07/05/2022	1.2	Updated device parameters

Notes

RoHS Compliance

The levels of RoHS restricted materials in this product are below the maximum concentration values (also referred to as the threshold limits) permitted for such substances, or are used in an exempted application, in accordance with EU Directive 2011/65/EC (RoHS2), as implemented March, 2013. RoHS Declarations for this product can be obtained from the Product Documentation sections of www.SemiQ.com.

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REACh substances of high concern (SVHC) information is available for this product. Since the European Chemicals Agency (ECHA) has published notice of their intent to frequently revise the SVHC listing for the foreseeable future,please contact our office at SemiQ Headquarters in Lake Forest, California to insure you get the most up-to-date REACh SVHC Declaration. REACh banned substance information (REACh Article 67) is also available upon request.

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