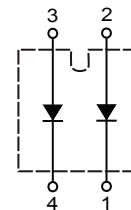
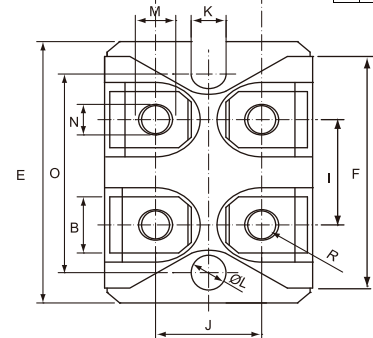
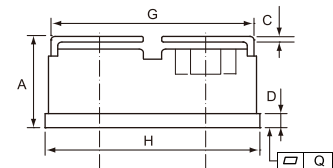


# SCHOTTKY DIODE MODULE TYPE 2X50A / 200V

## Features

- High Surge Capability
- Type 200V  $V_{RRM}$
- 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
GSXD050A020S1-D3	200V	140V	200V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current (Per pkg) (Per diode)	$I_{F(AV)}$	100A 50A	$T_C = 110^\circ\text{C}$
Peak Forward Surge Current (Per diode)	$I_{FSM}$	750A	8.3ms, half sine
Maximum Instantaneous Forward Voltage*	$V_F$	0.80V 0.92V	$I_{FM} = 50A; T_J = 125^\circ\text{C}$ $I_{FM} = 50A; T_J = 25^\circ\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per diode)	$I_R$	3mA 10mA 30mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$ $T_J = 150^\circ\text{C}$
Non-Repetitive Avalanche Energy (Per diode)	$E_{AS}$	1901mJ	$T_J = 25^\circ\text{C}$ , $I_{AS} = 50A, L = 1mH$
Isolation Voltage	$V_{iso}$	2500V	A.C. 1 minute
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.90°C/W	
Mounting Torque		1.3Nm	M4 Screw

\*Pulse Test: Pulse Width 300  $\mu\text{sec}$ , 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

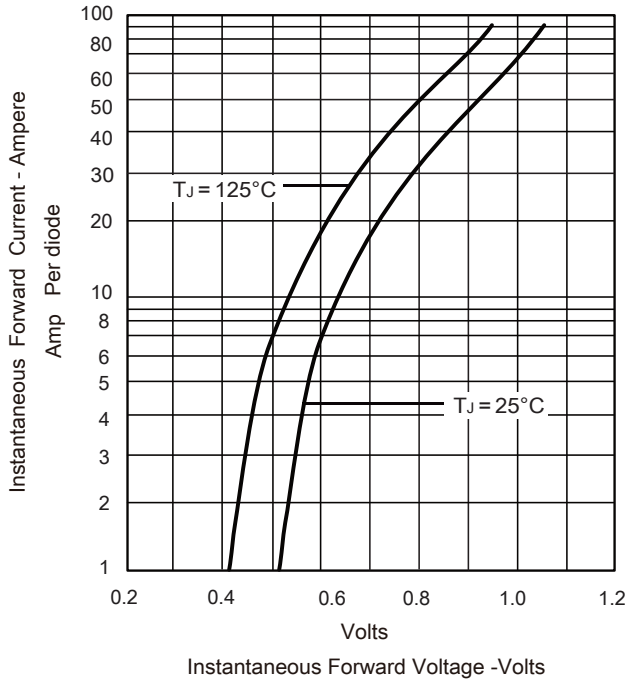


Figure.2 - Forward Derating Curve

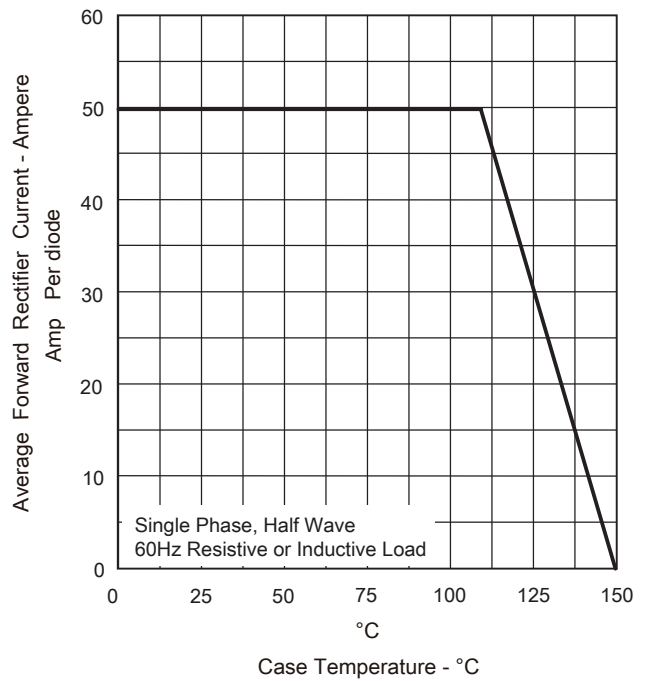


Figure.3 - Peak Forward Surge Current

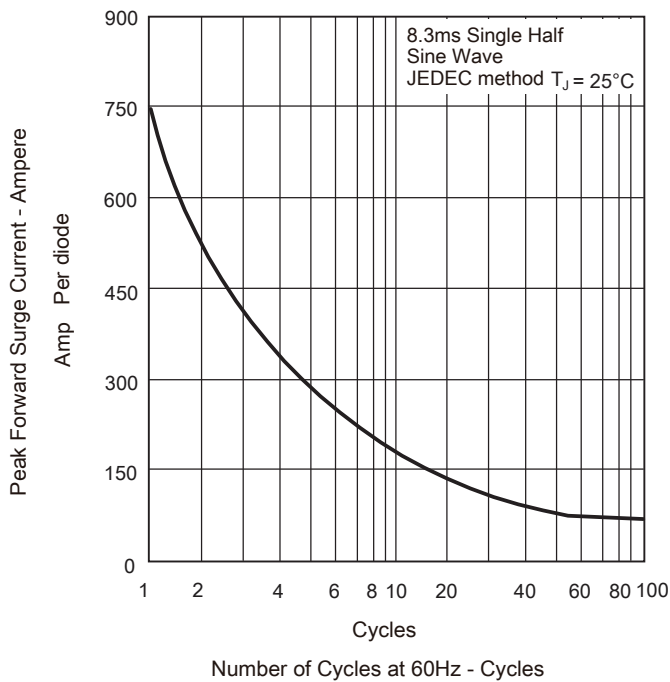
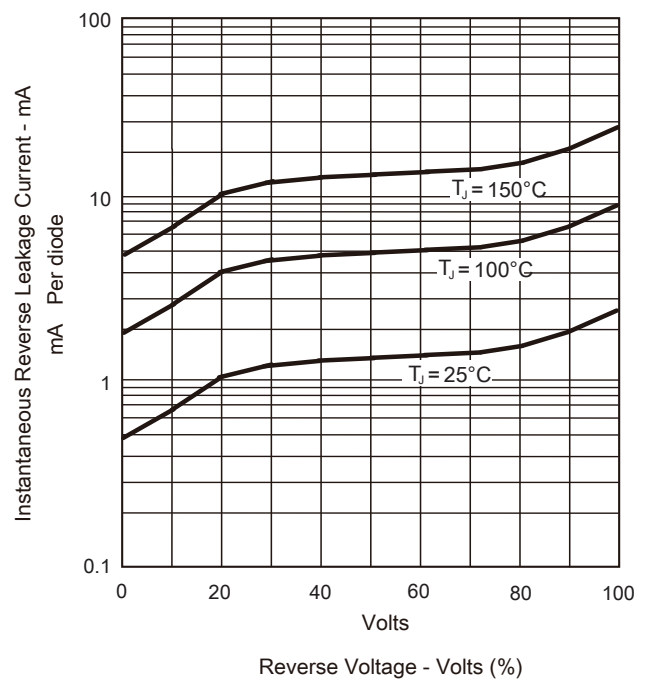


Figure.4 - Typical Reverse Characteristics



**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](http://www.SemiQ.com).

**REACH Compliance**

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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