

SUPER FAST DIODE MODULE TYPE 120A

Features

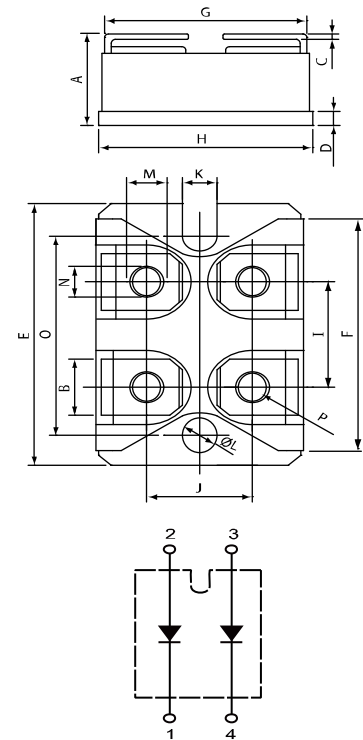
High Surge Capability
 Type 600V V_{RRM}
 Isolation Type Package
 Electrically Isolation base plate



Maximum Ratings

Operating Temperature : -55 °C to +175 °C
 Storage Temperature : -55 °C to +175 °C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GSXF060A060S1-D3	600V	420V	600V



Electrical Characteristics @ 25 °C Unless Otherwise Specified.

Average Forward Current (Per pkg)	$I_{F(AV)}$	120 A	$T_c = 125\text{ }^\circ\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	900 A	8.3ms, half sine
Maximum Instantaneous Forward Voltage* (Per leg)	V_F	1.5 V	$I_{FM} = 60\text{ A}; T_J = 25\text{ }^\circ\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg)	I_R	25 μA 3 mA	$T_J = 25\text{ }^\circ\text{C}$ $T_J = 150\text{ }^\circ\text{C}$
Maximum Reverse Recovery Time (Per leg)	T_{rr}	90 ns	$I_F = 0.5\text{ A}, I_R = 1.0\text{ A}$ $I_{RR} = 0.25\text{ A}$
Isolation Voltage	V_{iso}	2500 V	A.C. 1 minute
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.8 $^\circ\text{C/W}$	

* Pulse Test: Pulse Width 300 $\mu\text{ sec}$, Duty < 2%

DIM	DIMENSIONS			
	INCHES		MM	
	MIN	MXA	MIN	MXA
A	.500	.519	12.70	13.20
B	.307	.322	7.80	8.20
C	.029	.033	.75	.84
D	.077	.082	1.95	2.10
E	1.487	1.502	37.80	38.20
F	1.250	1.258	31.75	32.00
G	.931	.956	23.65	24.30
H	.996	1.007	25.30	25.60
I	.586	.594	14.90	15.10
J	.492	.516	12.50	13.10
K	.161	.169	4.10	4.30
L	.161	.169	4.10	4.30
M	.181	.191	4.60	4.95
N	.165	.177	4.20	4.50
O	1.184	1.192	30.10	30.30
P	M4*8			

Figure .1- Typical Forward Characteristics

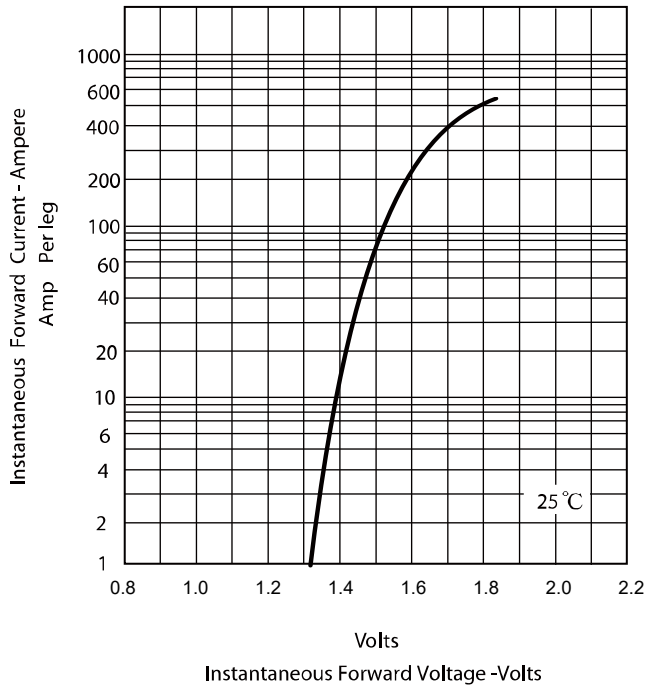


Figure.2 - Forward Derating Curve

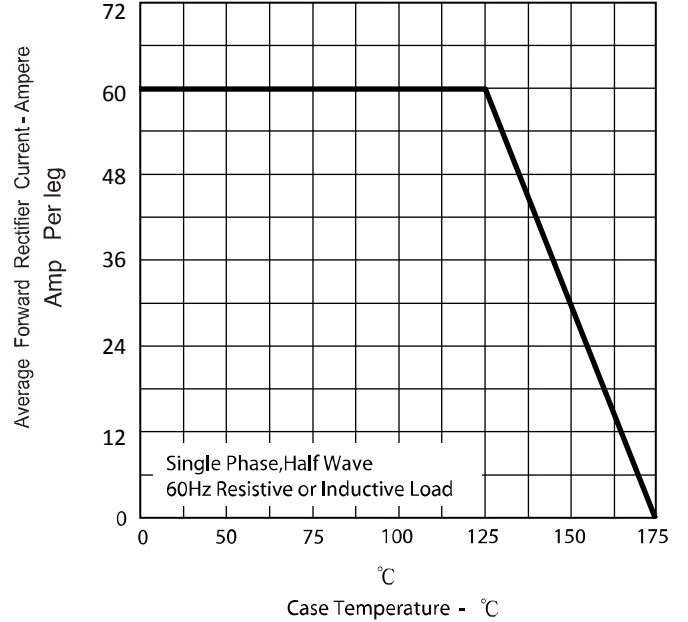


Figure.3 - Peak Forward Surge Current

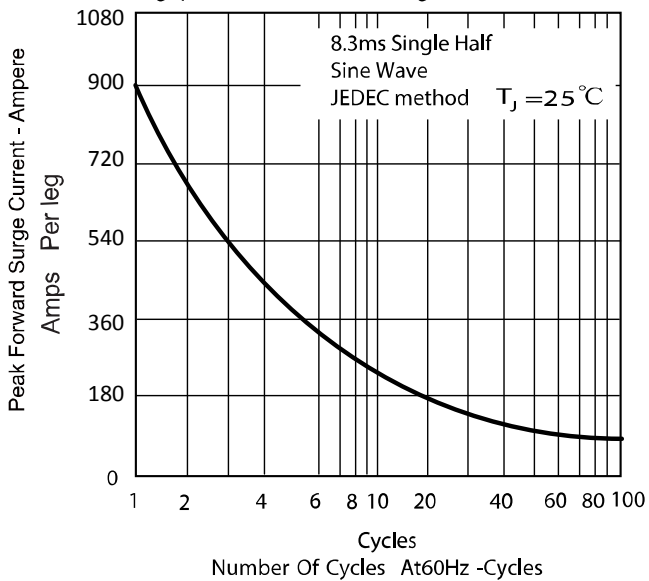
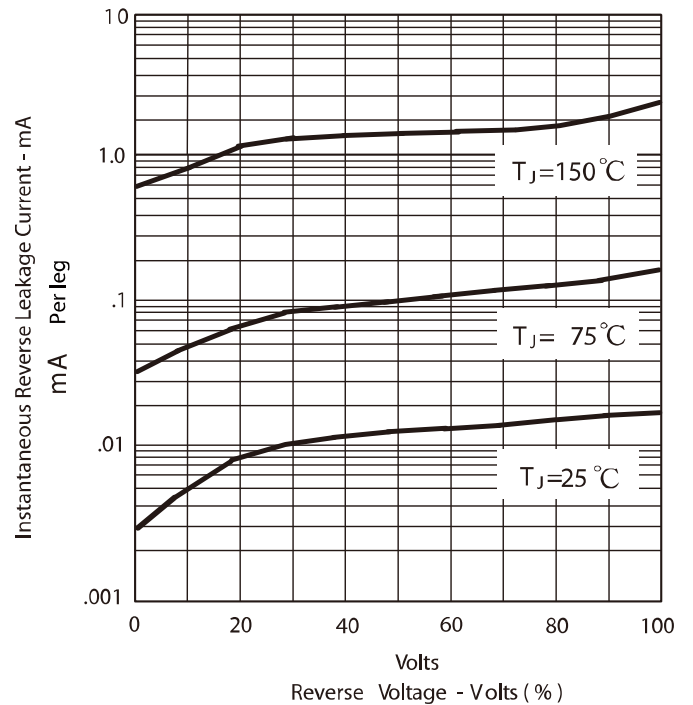


Figure .4 -Typical Reverse Characteristics



Revision History

Date	Revision	Notes
8/10/2014	1.0	Initial release
01/03/2020	1.1	Applied company name change

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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