Data Sheet GSXD120A66E1-D3

## SCHOTTKY DIODE MODULE TYPE 240A

## Features

High Surge Capability
Type 180 V Vrrm
Isolation Type Package
Electrically Isolation base plate

## Maximum Ratings

Operating Temperature : $-40^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}$ Storage Temperature : $-40^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}$

| Part Number | Maximum <br> Recurrent <br> Peak Reverse <br> Voltage | Maximum <br> RMS Voltage | Maximum DC <br> Blocking <br> Voltage |
| :---: | :---: | :---: | :---: |
| GSXD120A018S1-D3 | 180 V | 126 V | 180 V |

Electrical Characteristics @ $\mathbf{2 5}{ }^{\circ} \mathrm{C}$ Unless Otherwise Specified.

| Average Forward Current (Per pkg) | $\mathrm{IF}(\mathrm{AV})$ | 240A | $\mathrm{Tc}=110^{\circ} \mathrm{C}$ |
| :---: | :---: | :---: | :---: |
| Peak Forward Surge Current <br> (Per leg) | IFSM | 1500A | 8.3 ms , half sine |
| Maximum Instantaneous Forward Voltage (Per leg) | VF | $\begin{aligned} & 0.82 \mathrm{~V} \\ & 0.92 \mathrm{~V} \end{aligned}$ | $\begin{aligned} & I_{\text {FM }}=120 \mathrm{~A} ; \mathrm{T}_{J}=125^{\circ} \mathrm{C} \\ & \mathrm{I}_{\text {FM }}=120 \mathrm{~A} ; \mathrm{T}_{J}=25^{\circ} \mathrm{C} \end{aligned}$ |
| Maximum <br> NOTE(1) <br> Instantaneous <br> Reverse Current At <br> Rated DC Blocking <br> Voltage <br> (Per leg) | IR | 3 mA <br> 10 mA <br> 30 mA | $\begin{aligned} & \mathrm{T}_{J}=25^{\circ} \mathrm{C} \\ & \mathrm{~T}_{J}=100^{\circ} \mathrm{C} \\ & \mathrm{~T}_{J}=150^{\circ} \mathrm{C} \end{aligned}$ |
| Isolation Voltage | Viso | 2500V | A.C. 1 minute |
| Maximum Thermal Resistance Junction To Case (Per leg) | R j c | $0.38{ }^{\circ} \mathrm{C} / \mathrm{W}$ |  |

NOTE :
(1) Pulse Test: Pulse Width $300 \mu \mathrm{sec}$, Duty $<2 \%$


| DIMENSIONS |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: |
| DIM | 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


Figupre. 3 - Peak Forward Surge Current


Instantaneous Forward Voltage -Volts

Number Of Cycles At60Hz -Cycles

Figure .2- Forward Derating Curve


## Revision History

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

## Notes <br> 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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