



**STANDARD RECOVERY DIODE MODULE TYPE S  
2X40A / 600-800V**

**Features**

- High Surge Capability
- Types up to 800V  $V_{RRM}$
- Isolation Type Package
- Electrically Isolation base plate
- RoHS compliant

**Maximum Ratings**

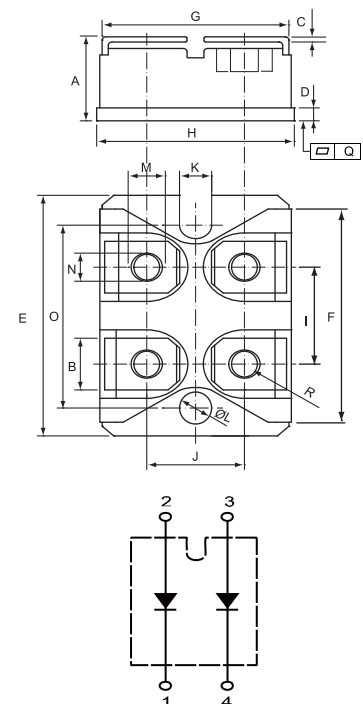
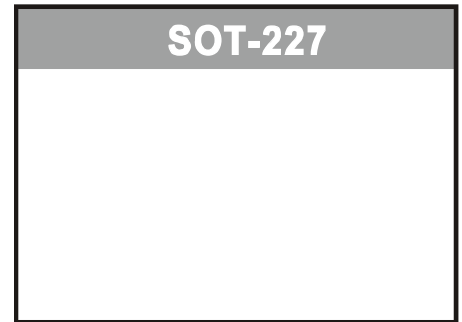
Operating Temperature  $\bar{E}$  -55 °C to +175 °C  
Storage Temperature  $\bar{E}$  -55 °C to +175 °C

| Part Number   | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|---------------|--|---------------------|-----------------------------|
| MSRI2X40-060A | 600V                                   | 420V                | 600V                        |
| MSRI2X40-080A | 800V                                   | 560V                | 800V                        |

**Electrical Characteristics @ 25f Unless Otherwise Specified.**

|   |             |             |   |
|---|-------------|-------------|---|
| Average Forward Current   | $I_{F(AV)}$ | 40A         | $T_c=125\text{ W}$                      |
| Peak Forward Surge Current  | $I_{FSM}$   | 800A        | 8.3ms, half sine                        |
| Maximum Instantaneous Forward Voltage*                              | $V_F$       | 1.2V        | $I_{FM}=40\text{A}; T_J=25\text{ W}$    |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage* | $I_R$       | 25uA<br>5mA | $T_J=25\text{ W}$<br>$T_J=150\text{ W}$ |
| Isolation Voltage   | $V_{iso}$   | 2500V       | A.C. 1 minute                           |
| Maximum Thermal Resistance Junction To Case                         | $R_{jc}$    | 0.65 WW     |   |
| Mounting torque   | N-m         | 1.3         | M4 Screw                                |

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



**MSRI 2X40 t xxxA**

|   | 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       |       |       |       |

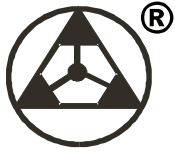


Figure.1 - Typical Forward Characteristics

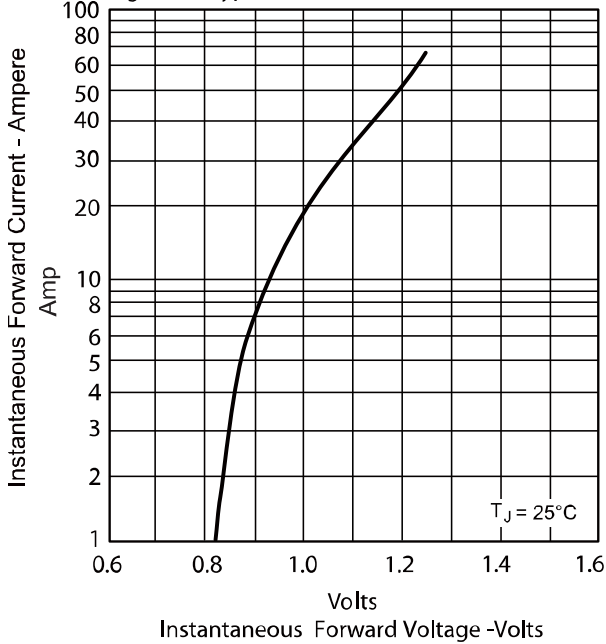


Figure.2 - Forward Derating Curve

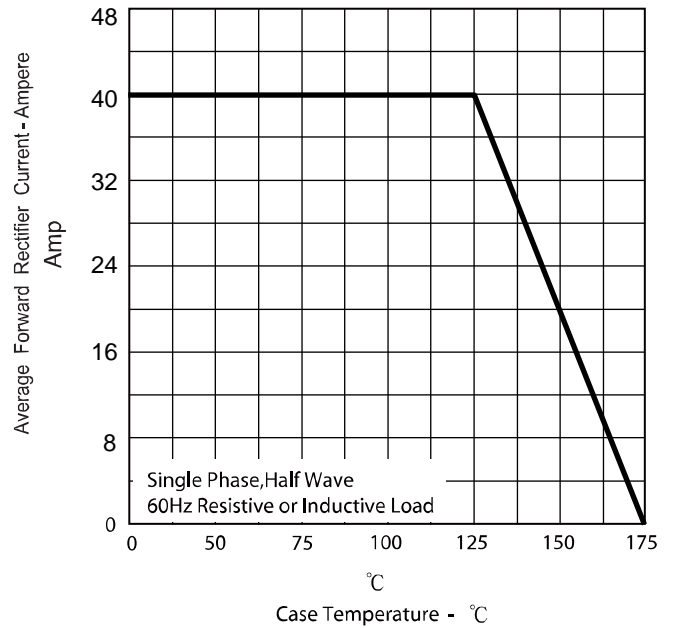


Figure .3 - Peak Forward Surge Current

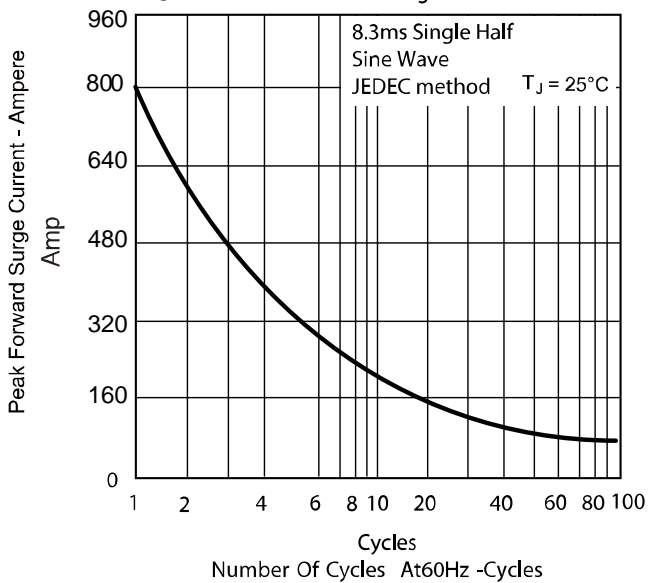
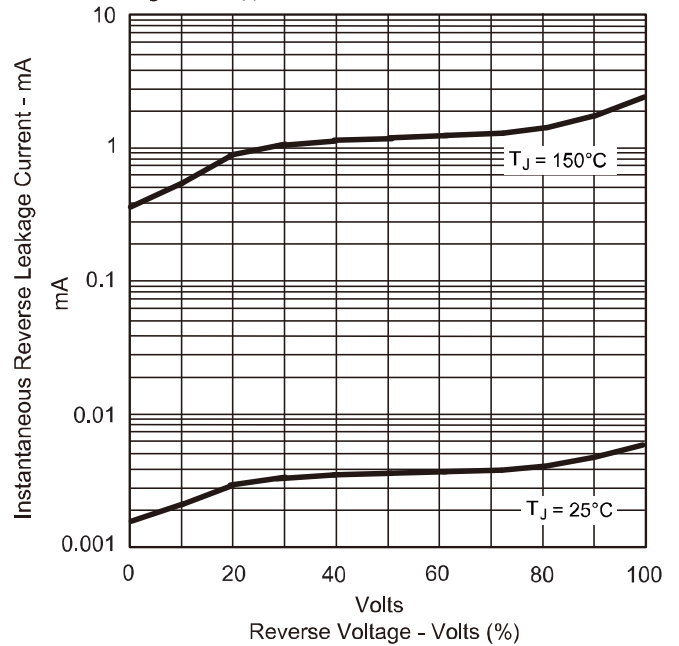


Figure .4 -Typical Reverse Characteristics





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