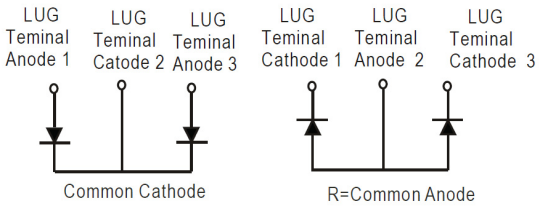
# Low $V_F$ Silicon Power Schottky Diode

$V_{RRM}$ = 40 V

$I_{F(AV)}$ = 400 A

### Features

- High Surge Capability
- Type 40 V $V_{RRM}$
- Isolation Type Package
- Electrically Isolated Base Plate
- Not ESD Sensitive




**Heavy Three Tower Package**



RoHS COMPLIANT

REACH COMPLIANCE

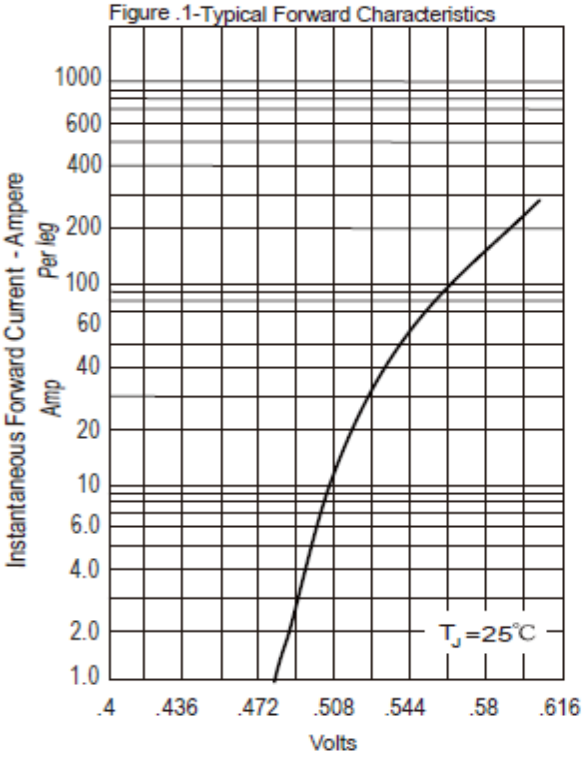
### Maximum ratings, at $T_j$ = 25 °C, unless otherwise specified ("R" devices have leads reversed)

| Parameter | Symbol | Conditions | MBRTA40040(R)L | Unit |
|---|---|---|---|---|
| Maximum recurrent peak reverse voltage | $V_{RRM}$ | | 40 | V |
| Maximum RMS voltage | $V_{RMS}$ | | 28 | V |
| Maximum DC blocking voltage | $V_{DC}$ | | 40 | V |
| Operating temperature | $T_j$ | | -55 to 150 | °C |
| Storage temperature | $T_{stg}$ | | -55 to 150 | °C |

### Electrical characteristics, at Tj = 25 °C, unless otherwise specified

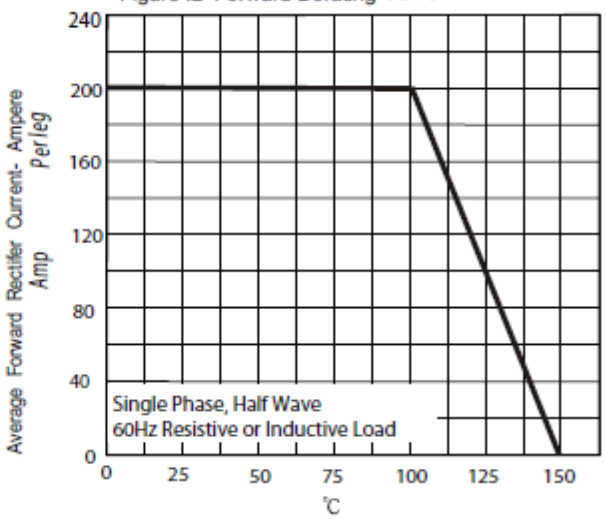
| Parameter | Symbol | Conditions | MBRTA40040(R)L | Unit |
|---|---|---|---|---|
| Average forward current (per pkg) | $I_{F(AV)}$ | $T_C$ = 100 °C | 400 | A |
| Peak forward surge current (per leg) | $I_{FSM}$ | $t_p$ = 8.3 ms, half sine | 3000 | A |
| Maximum instantaneous forward voltage (per leg) | $V_F$ | $I_{FM}$ = 200 A, Tj = 25 °C | 0.60 | V |
| Maximum instantaneous reverse current at rated DC blocking voltage (per leg) | $I_R$ | $T_j$ = 25 °C<br>$T_j$ = 100 °C | 5<br>300 | mA |
| **Thermal characteristics** | | | | |
| Maximum thermal resistance, junction - case (per leg) | $R_{\theta JC}$ | | 0.35 | °C/W |

Figure .1-Typical Forward Characteristics



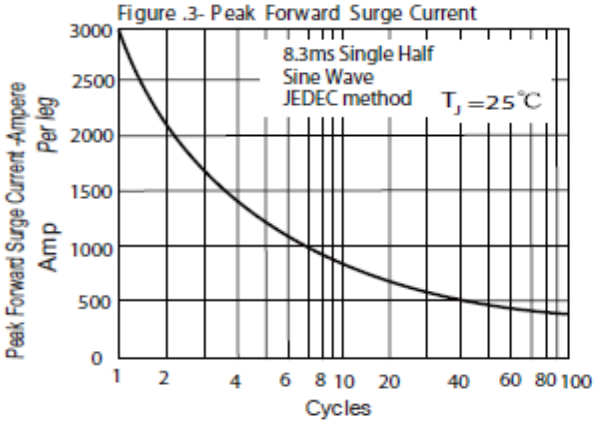

Instantaneous Forward Voltage - Volts

Figure .2- Forward Derating Curve



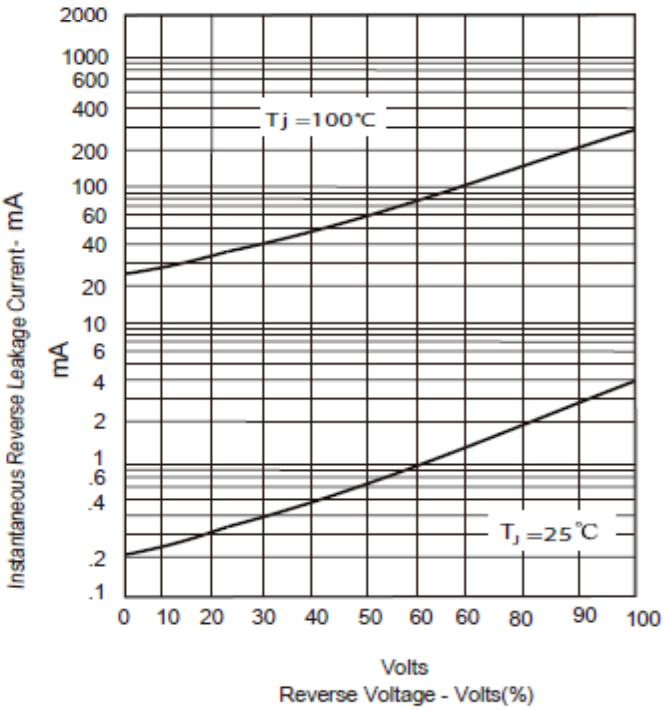

Case Temperature - ℃

Figure .3- Peak Forward Surge Current




Number Of Cycles At 60Hz - Cycles

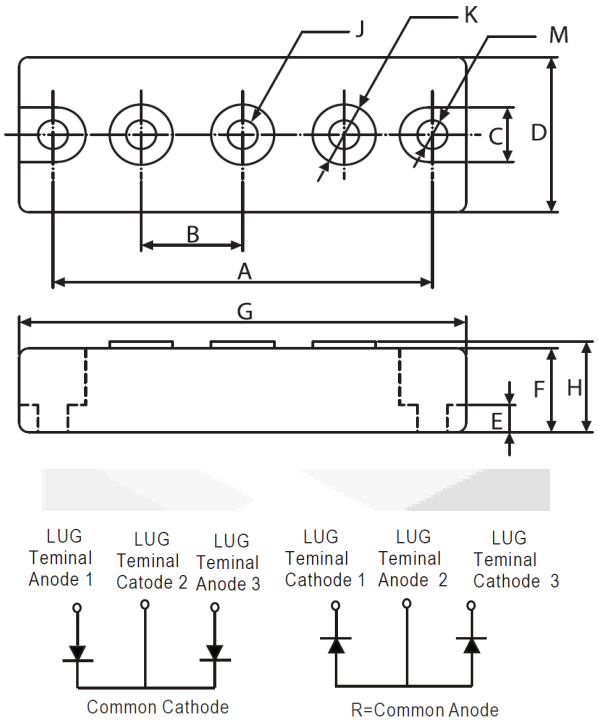
Figure .4-Typical Reverse Characteristics




Reverse Voltage - Volts(%)

## Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.




| DIMENSIONS | | | | |
|---|---|---|---|---|
| | INCHES | | MM | |
| | MIN | MAX | MIN | MAX |
| A | 3.150 | NOM | 80.01 | NOM |
| B | .872 | .892 | 22.15 | 22.65 |
| C | .465 | .479 | 11.82 | 12.18 |
| D | 1.337 | 1.356 | 33.95 | 34.45 |
| E | .230 | .234 | 5.84 | 6.16 |
| F | .725 | REF | 18.42 | REF |
| G | 3.668 | 3.768 | 93.17 | 95.71 |
| H | ---- | .791 | --- | 20.10 |
| J | 1/4 - 20 UNC FULL | | | |
| K | .509 | .538 | 12.92 | 13.68 |
| M | .238 | .258 | 6.05 | 6.55 |