

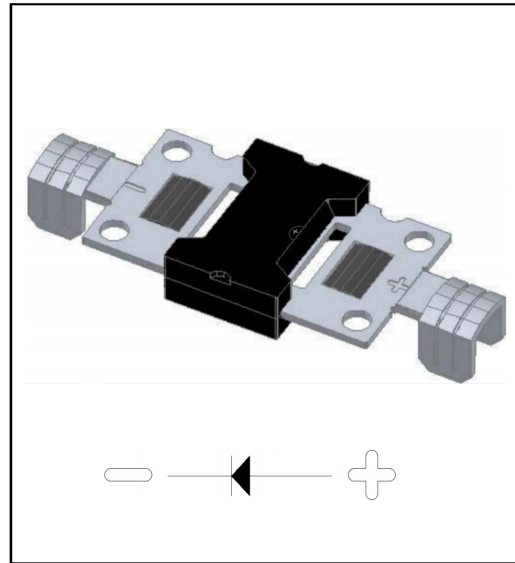
CURRENT 15 Ampere  
VOLTAGE RANG 100 Volts

## GMK15100

|              |               |
|--------------|---------------|
| $I_O$        | <b>15 A</b>   |
| $V_{RRM}$    | <b>100 V</b>  |
| $T_j$        | <b>150 °C</b> |
| $V_{F(typ)}$ | <b>0.98V</b>  |

### FEATURES

- Schottky Barrier high diode;
- Low thermal resistance;
- Lower forward voltage drop, low power loss;
- Isolate Package design, ideal for heat dispersion;
- High forward current capability;
- Excellent anti-humidity;
- Low profile package;
- High forward surge capability;



### Mechical Data

- CASE:HYX09E
- Terminals: Copper;
- High temperature soldering guaranteed;  
Heated-tool welding 260 °C, 10seconds
- Marking: As marked on product;

### MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted )

| Symbol          | Parameter   | GMK15100 | Unit                        |
|-----------------|---|----------|-----------------------------|
| $V_{RRM}$       | Peak repetitive reverse voltage   | 100      | V                           |
| $V_{RWM}$       | Working peak reverse voltage  |          |                             |
| $V_R$           | DC blocking voltage   |          |                             |
| $V_{R(RMS)}$    | RMS reverse voltage   | 72       | V                           |
| $I_O$           | Average rectified output current@60Hz half sine-wave, R-load, $T_a=25^{\circ}\text{C}$                        | 15       | A                           |
| $I_{FSM}$       | Non-Repetitive peak forward surge current (8.3ms half sine wave)  | 300      | A                           |
| $I^2t$          | Rating for fusing ( $t<8.3\text{ms}$ )  | 664      | $\text{A}^2\text{S}$        |
| $R_{\theta Jc}$ | Thermal resistance from junction to case  | 1.5      | $^{\circ}\text{C}/\text{W}$ |
| $T_j$           | Junction temperature<br>IN DC Forward Mode-Forward Operations, without reverse bias, $t \leq 1 \text{ h}$ (1) | -55~+150 | $^{\circ}\text{C}$          |
| $T_{stg}$       | Storage temperature   | -55~+150 | $^{\circ}\text{C}$          |

NOTE: (1) Meets the requirements of IEC 61215 Ed. 2 bypass diode thermal test.

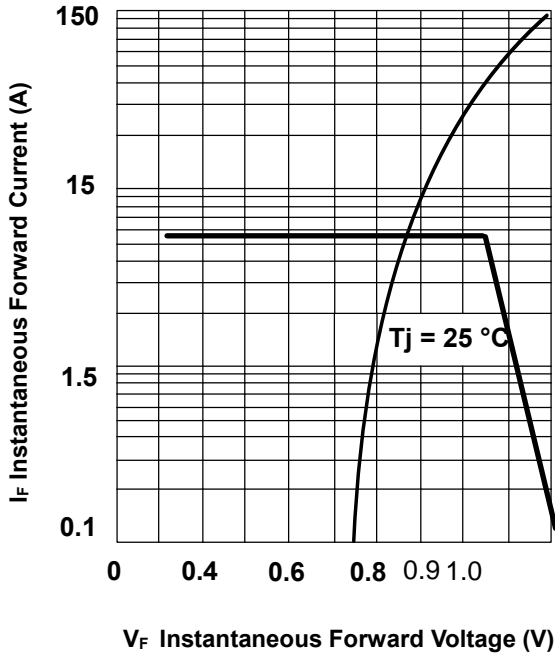
### ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

| Parameter       | Symbol     | Test conditions   | Min                       | Typ  | Max  | Unit          |
|-----------------|------------|-------------------|---------------------------|------|------|---------------|
| Reverse voltage | $V_{(BR)}$ | $I_R=1\text{mA}$  | 105                       |      |      | V             |
| Reverse current | $I_R$      | $V_R=100\text{V}$ | $T_j=25^{\circ}\text{C}$  | 25   | 100  | $\mu\text{A}$ |
|                 |            |                   | $T_j=100^{\circ}\text{C}$ |      | 10   | $\text{mA}$   |
| Forward voltage | $V_F$      | $I_F=15\text{A}$  |                           | 0.91 | 0.99 | V             |

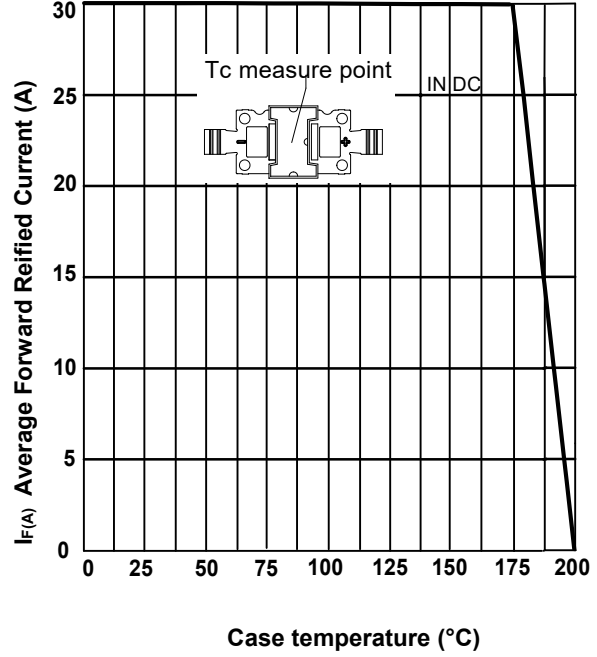
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**GMK15100**

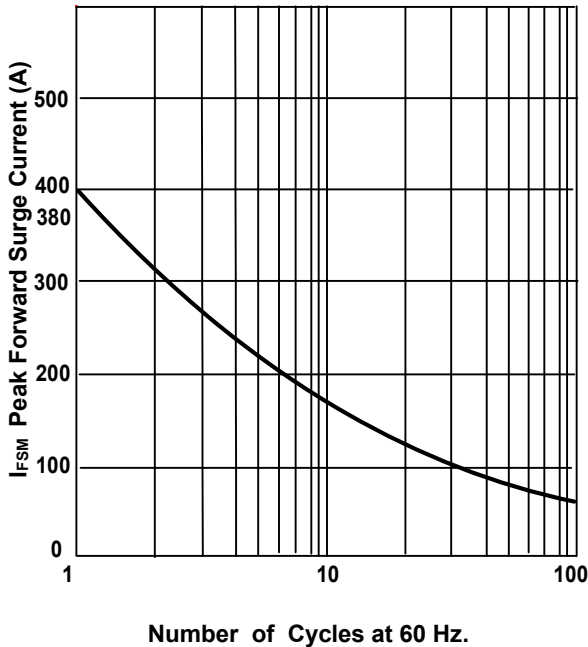
TYPICAL FORWARD CHARACTERISTIC



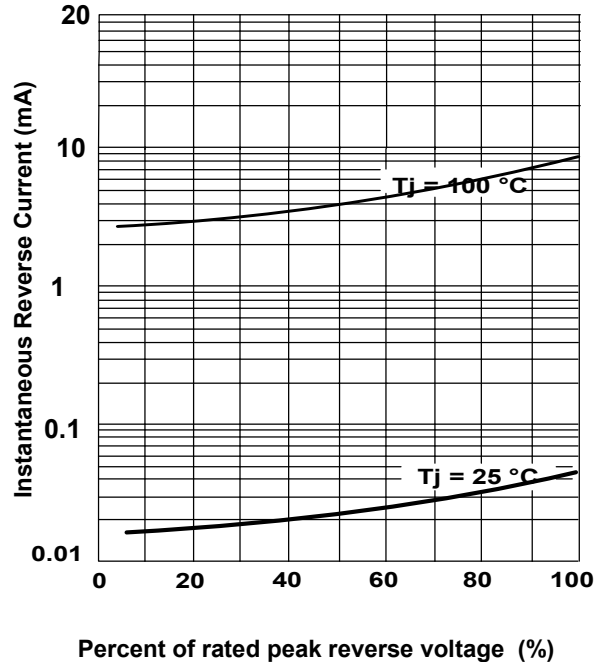
FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT

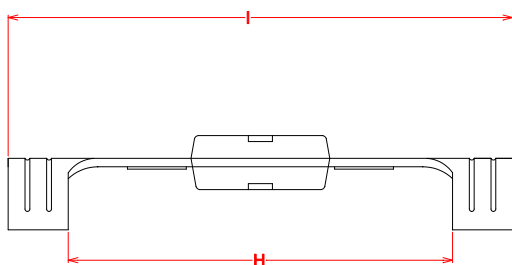
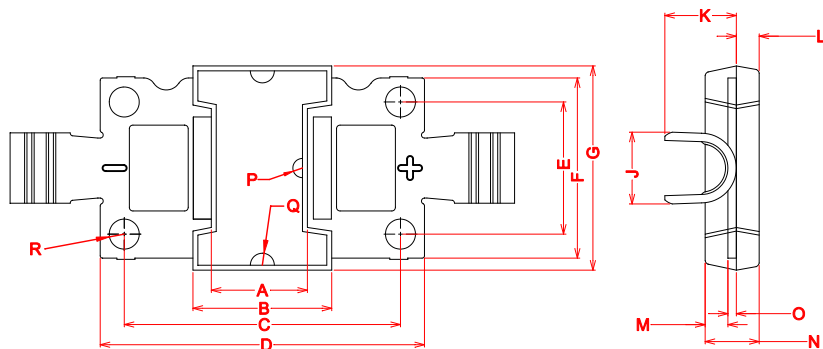


MAXIMUM NON REPETITIVE SURGE CURRENT



CURRENT 15 Ampere  
 VOLTAGE RANG 100 Volts

**GMK15100**



| Symbol | Dinemsions In Millimeters |        | Dinemsions In Inches |       |
|--------|---------------------------|--------|----------------------|-------|
|        | Min                       | Max    | Min                  | Max   |
| A      | 7.800                     | 8.200  | 0.307                | 0.323 |
| B      | 11.350                    | 11.750 | 0.447                | 0.463 |
| C      | 22.500                    | 23.500 | 0.886                | 0.925 |
| D      | 26.500                    | 27.500 | 1.043                | 1.083 |
| E      | 10.500                    | 11.500 | 0.413                | 0.453 |
| F      | 14.500                    | 15.500 | 0.571                | 0.610 |
| G      | 16.500                    | 17.500 | 0.650                | 0.689 |
| H      | 31.500                    | 32.500 | 1.240                | 1.280 |
| I      | 41.500                    | 42.500 | 1.634                | 1.673 |
| J      | 5.700                     | 6.300  | 0.224                | 0.248 |
| K      | 5.750                     | 6.150  | 0.226                | 0.242 |
| L      | 1.700                     | 2.100  | 0.067                | 0.083 |
| M      | 1.700                     | 2.100  | 0.067                | 0.083 |
| N      | 4.300                     | 4.700  | 0.169                | 0.185 |
| O      | 0.600                     | 0.800  | 0.024                | 0.031 |
| P      | 0.800 TYP                 |        | 0.031 TYP            |       |
| Q      | 1.000 TYP                 |        | 0.039 TYP            |       |
| R      | 1.250 TYP                 |        | 0.049 TYP            |       |

**Ordering Information**

| PREFERED P/N | TUBE(pcs) | CARTON(pcs) |
|--------------|-----------|-------------|
| GMK15100     | 30        | 1500        |