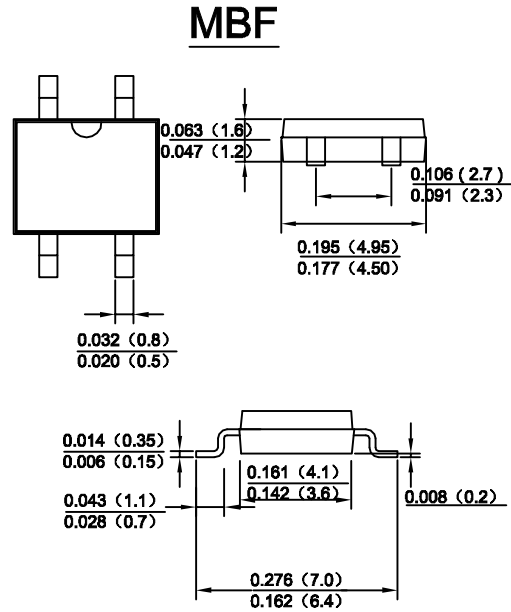


Features

- Schottky Brrier Chip
- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 50A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: MB-F, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number
- Lead Free: For RoHS / Lead Free Version,



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| TYPE NUMBER | SYMBOL | KMB 22F | KMB 23F | KMB 24F | KMB 245F | KMB 25F | KMB 26F | KMB 28F | KMB 210F | KMB 215F | KMB 220F | KMB 225F | UNITS | |
|---|-----------------|-------------|---------|---------|----------|---------|---------|---------|----------|----------|----------|----------|---------------------------|----|
| Peak Repetitive Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 45 | 50 | 60 | 80 | 100 | 150 | 200 | 250 | V | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 14 | 21 | 28 | 31 | 35 | 42 | 56 | 70 | 105 | 140 | 175 | | |
| DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 45 | 50 | 60 | 80 | 100 | 150 | 200 | 250 | | |
| Average Rectified Output Current (Note1) @ $T_A = 90^\circ\text{C}$ | I_o | 2.0 | | | | | | | | | | | A | |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 50 | | | | | | | | | | | A | |
| I^2t Rating for Fusing ($t < 8.3\text{ms}$) | I^2t | | | | | | | | | | | | A^2s | |
| Forward Voltage per element @ $I_F = 2.0\text{A}$ | V_{FM} | 0.55 | | | 0.7 | | | 0.85 | | 0.90 | | 0.92 | V | |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$ | I_{RM} | 0.1 | | | | | | 0.05 | | | | | | mA |
| | | 10 | | | | | | 5 | | | | | | |
| Typical Junction Capacitance per leg | C_j | 28 | | | | | | | | | | | pF | |
| Typical Thermal Resistance per leg (Note2) | $R_{\theta JA}$ | 75 | | | | | | | | | | | $^\circ\text{C}/\text{W}$ | |
| Operating junction temperature range | T_J | -55 to +150 | | | | | | | | | | | $^\circ\text{C}$ | |
| Operating and Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | | | | | $^\circ\text{C}$ | |

Note:

1. Mounted on aluminum substrate PC board with 1.3mm^2 solder pad.
2. Thermal REsistance From Junction to Ambient

FIG. 1- FORWARD CURRENT DERATING CURVE

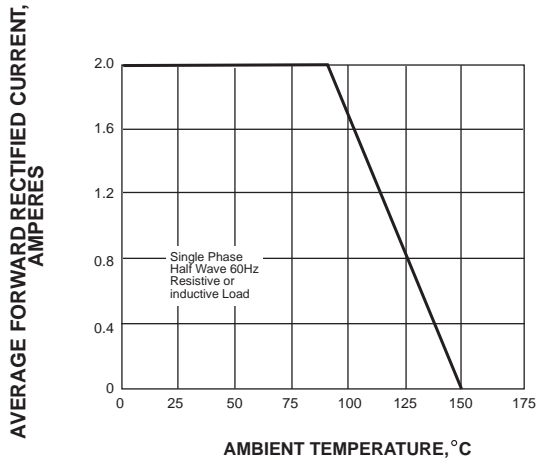


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

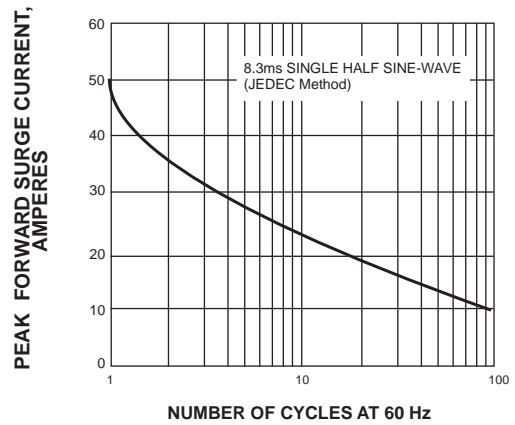


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

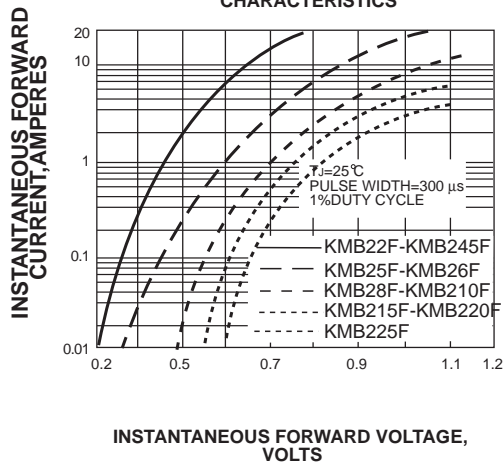


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

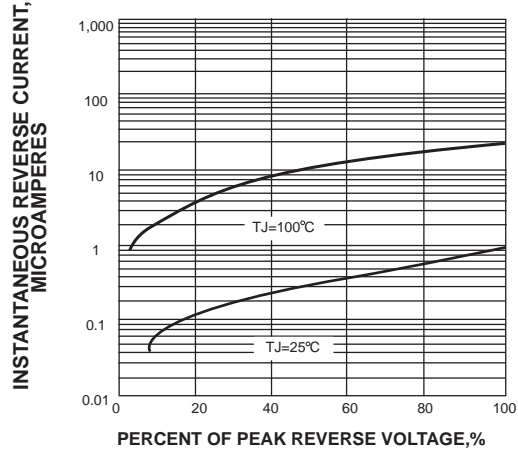


FIG. 5-TYPICAL TRANSIENT THERMAL IMPEDANCE

