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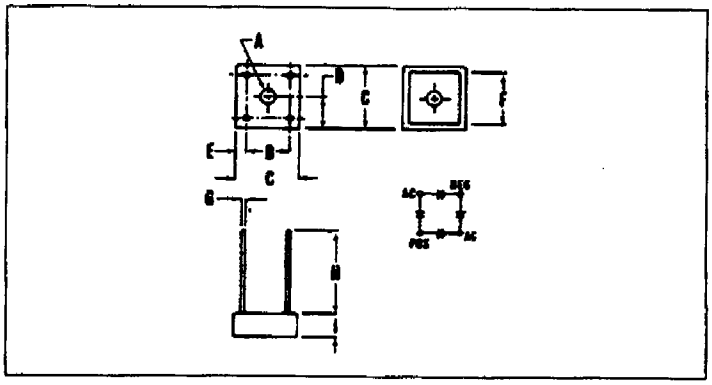
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# VJ048XM – VJ1048XM

## 10 Amp Fast Recovery Time Epoxy Bridge Rectifiers

200 Nanosecond Reverse Recovery Time
50, 100, 200, 400, 600, 800, and 1000V $V_{RRM}$ Rating
10 Amps DC Forward Current at $T_C$ = 60°C
75 Amps Peak One Half Cycle Surge Current
2000 Volts Minimum Circuit-to-Case Insulation
Glass Passivated Silicon Chips

| LTR. | INCHES | MILLIMETERS |
|---|---|---|
| A | .137–.167 Dia. | 3,48–4,24 Dia. |
| B | .411–.441 | 10,44–11,20 |
| C | .590–.610 | 14,99–15,49 |
| D | .295–.305 | 7,49–7,75 |
| E | .082–.092 | 2,08–2,34 |
| F | .545–.555 | 13,8–14,10 |
| G | .038–.042 | ,970–1,07 |
| H | 1.0 Min. | 25,40 Min. |
| I | .195–.215 | 4,95–5,46 |



**MAXIMUM RATINGS** (At $T_A$ = 25°C unless otherwise noted)

| RATINGS | SYMBOL | VJ048XM | VJ148XM | VJ248XM | VJ448XM | VJ648XM | VJ848XM | VJ1048XM | UNITS |
|---|---|---|---|---|---|---|---|---|---|
| DC Blocking Voltage, Working Peak Reverse Voltage, Peak Repetitive Reverse Voltage, | $V_{RM}$ $V_{RWM}$ $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Peak Surge Current, ½ Cycle at 60 Hz, (Non-Rep) and $T_C$ = 60°C (Fig.2) | $I_{FSM}$ | 75 | | | | | | | Amps |
| Peak Surge Current, 1 sec. at 60 Hz and $T_C$ = 60°C (Fig. 2) | $I_{FRM}$ | 27 | | | | | | | Amps |
| Avg. Forward Current at $T_C$ = 60°C, (Fig. 1) | $I_O$ | 10 | | | | | | | Amps |
| Junction Operating and Storage Temperature Range | $T_J$, $T_{STG}$ | – 50 to + 135 | | | | | | | °C |
| Maximum Soldering Temperature & Time | | 10 Sec. at 265°C | | | | | | | |

**ELECTRICAL CHARACTERISTICS** (At $T_A$ = 25°C unless otherwise noted)

| CHARACTERISTICS | SYMBOL | | | UNITS |
|---|---|---|---|---|
| Maximum Instantaneous Forward Voltage Drop (per diode) at 10 Amps (Fig. 3) | $V_{FM}$ | 1.5 | 1.6 | Volts/ Leg |
| Maximum Reverse Recovery Time $I_F$ = 1 Amp, $I_R$ = 2 Amp, $I_{RR}$ = 0.5 Amp | $t_{rr}$ | 200 | | nsec |
| Maximum Reverse Current at Rated $V_{RM}$ | $I_{RM}$ | 10 | | µA |
| Maximum Reverse Current at Rated $V_{RM}$ at $T_J$ = 125°C | $I_{RM}$ | 4 | | mA |
| Insulation Strength Circuit to Case (Min.) | | 2000 | | Volts DC |
| Maximum Thermal Resistance Junction To Case | $R_{\theta JC}$ | 3 | | °C/W |

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**Quality Semi-Conductors**

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