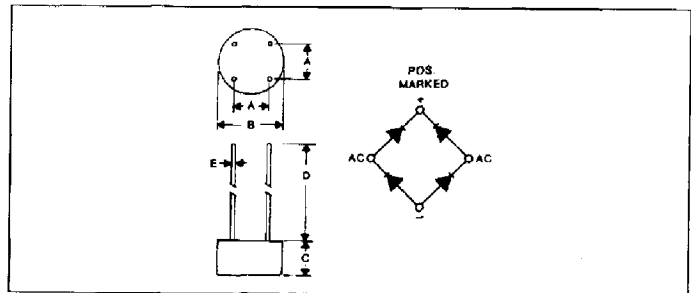


VE27 - VE108

1 Amp Epoxy Bridge Rectifiers VE Series

Controlled Avalanche Series with 250V, 450V,
650V, and 850V Minimum Avalanche Ratings
Non-controlled Avalanche Series with 50V, 100V,
200V, 400V, 600V, 800V, and 1000V V_{RRM} Ratings
Glass Passivated Silicon Chips

| LTR. | INCHES | MILLIMETERS |
|------|----------------|----------------|
| A | .185-.215 | 4.70-5.46 |
| B | .350-.365 | 8.89-9.27 |
| C | .190-.215 | 4.83-5.46 |
| D | 1.0 MIN. | 25.4 MIN. |
| E | .022-.028 DIA. | .558-.711 DIA. |



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

| RATINGS | SYMBOL | CONTROLLED AVALANCHE | | | | NON-CONTROLLED AVALANCHE | | | | | | UNITS | | |
|--|----------------|----------------------|------|------|------|--------------------------|------|-------------------------------|------|------|------|-------|-------|------------------|
| | | VE27 | VE47 | VE67 | VE87 | VE08 | VE18 | VE28 | VE48 | VE68 | VE88 | | VE108 | |
| Series Number | | | | | | | | | | | | | | |
| DC Blocking Voltage | V_{RM} | 200 | 400 | 500 | 800 | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts | |
| Working Peak Reverse Voltage | V_{RWM} | | | | | | | | | | | | | |
| Peak Repetitive Reverse Voltage | V_{RRM} | | | | | | | | | | | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 140 | 280 | 420 | 560 | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts | |
| Power Dissipation in $V_{(BR)}$ Region for 100 μSEC Square Wave | P_{RM} | 200 | | | | NA | | | | | | Watts | | |
| Continuous Power Dissipation in $V_{(BR)}$ Region at $T_A = 65^\circ\text{C}$ | P_R | 1 | | | | NA | | | | | | Watts | | |
| Peak Surge Current, $\frac{1}{2}$ Cycle at 60 Hz. (Non-Rep) at $T_A = 65^\circ\text{C}$ (Fig. 2) | I_{FSM} | | | | | | | 25 | | | | | | Amps |
| Peak Surge Current, 1 sec at 60 Hz and $T_A = 65^\circ\text{C}$ (Fig. 2) | I_{FRM} | | | | | | | 4 | | | | | | Amps |
| Avg. Forward Current at $T_A = 65^\circ\text{C}$ (Fig. 1) | I_C | | | | | | | 1 | | | | | | Amps |
| Junction Operating and Storage Temperature Range | T_J, T_{STG} | | | | | | | - 50 to + 150 | | | | | | $^\circ\text{C}$ |
| Max Soldering Temperature & Time | | | | | | | | 10 Sec at 265°C | | | | | | |

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

| CHARACTERISTICS | SYMBOL | CONTROLLED AVALANCHE | | | | NON-CONTROLLED AVALANCHE | | | | | | UNITS | | |
|---|------------|----------------------|------|------|------|--------------------------|------|------|------|------|------|-------|-------|---------------------------|
| | | VE27 | VE47 | VE67 | VE87 | VE08 | VE18 | VE28 | VE48 | VE68 | VE88 | | VE108 | |
| Series Number | | | | | | | | | | | | | | |
| Minimum Avalanche Voltage | $V_{(BR)}$ | 250 | 450 | 650 | 850 | NA | | | | | | Volts | | |
| Maximum Avalanche Voltage | $V_{(BR)}$ | 700 | 900 | 1100 | 1300 | NA | | | | | | Volts | | |
| Maximum Instantaneous Forward Voltage Drop (Per Diode) at 1 Amp (Fig. 3) | V_{FM} | | | | | | | 1.2 | | | | | | Volt |
| Maximum Reverse Current at Rated V_{RM} | I_{RM} | | | | | | | 5 | | | | | | μA |
| Maximum Reverse Current at Rated V_{RM} at $T_J = 125^\circ\text{C}$ (Fig. 4) | I_{RV} | | | | | | | 500 | | | | | | μA |
| Insulation strength from Circuit to case (Min.) | | | | | | | | 2000 | | | | | | Vdc |
| Thermal Resistance (Typ) Junction to Ambient | R_{JA} | | | | | | | 45 | | | | | | $^\circ\text{C}/\text{W}$ |



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Quality Semi-Conductors