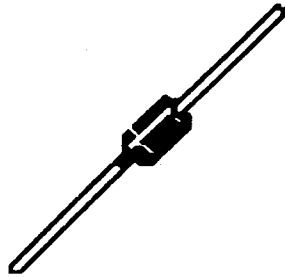
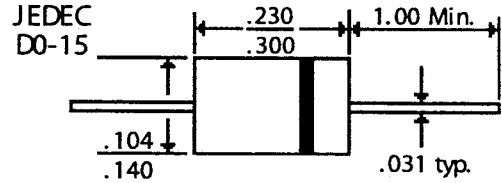


FR150G . . . 1510G Series

Description



Mechanical Dimensions



Features

- n FAST SWITCHING FOR HIGH EFFICIENCY
- n HIGH SURGE CAPABILITY

- n 1.5 AMP OPERATION @ $T_A = 55^\circ\text{C}$, WITH NO THERMAL RUNAWAY
- n MEETS UL SPECIFICATION 94V-0

| FR150 . . . 1510 Series | | | | | | | | Units |
|----------------------------------------------------------------------------------|-------|-------|-------|------------|-------|-------|--------|------------------|
| Maximum Ratings | FR150 | FR151 | FR152 | FR154 | FR156 | FR158 | FR1510 | |
| Peak Repetitive Reverse Voltage... V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| RMS Reverse Voltage... $V_{R(rms)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| DC Blocking Voltage... V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Average Forward Rectified Current... $I_{F(av)}$ $T_A = 55^\circ\text{C}$ | ..... |  |  | 1.5 | ..... |  |  | Amps |
| Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Current & Temp | ..... |  |  | 50 | ..... |  |  | Amps |
| Operating & Storage Temperature Range... T_J, T_{STRG} | ..... |  |  | -65 to 150 | ..... |  |  | $^\circ\text{C}$ |
| Electrical Characteristics | | | | | | | | |
| Maximum Forward Voltage @ 1.5A... V_F | ..... |  |  | 1.3 | ..... |  |  | Volts |
| Maximum DC Reverse Current... I_R @ Rated DC Blocking Voltage | ..... |  |  | 5.0 | ..... |  |  | μAmps |
|  | ..... |  |  | 100 | ..... |  |  | μAmps |
| Typical Junction Capacitance... C_j (Note 1) | ..... |  |  | 30 | ..... |  |  | pF |
| Maximum Reverse Recovery Time... t_{RR} | 150 | 150 | 150 | 150 | 250 | 500 | 500 | ns |

1.5 Amps Fast Recovery Glass Passivated Rectifiers

Fig. 1 FORWARD CURRENT DERATING CURVE

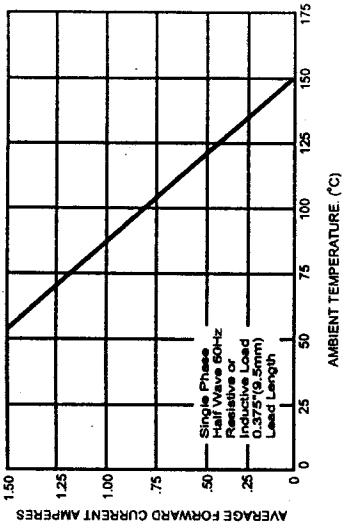


Fig. 2 TYPICAL FWD CHARACTERISTICS, PER ELEM

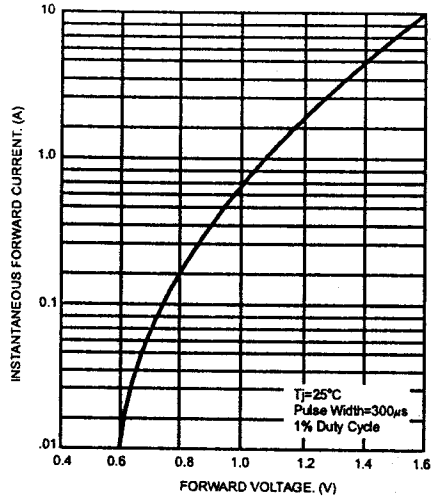


Fig. 3 MAXIMUM NON-REPETITIVE SURGE CURRENT

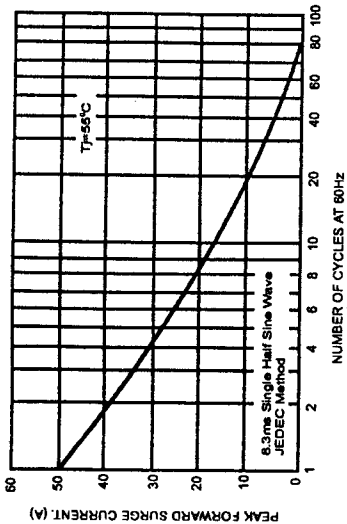
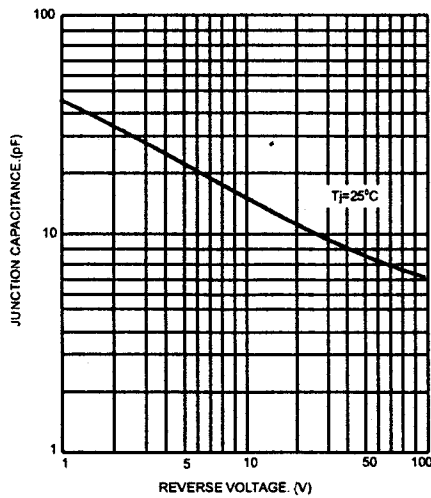


Fig. 4 TYPICAL JUNCTION CAPACITANCE



Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 HZ Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

Notes:

1. THERMAL RESISTANCE JUNCTION TO AMBIENT, MOUNTED ON PCB AT 9.5MM LEADD LENGTH.
2. Thermal resistance from junction to ambient and junction to lead mounted on PCB with 5"x 4"x 0.8cm THICK ALL PLATE HEATSINK.