

January 7, 1998

CHARACTERISTICS (@ 25°C unless otherwise specified)

| | Symbol | 1N5614 | 1N5616 | 1N5618 | 1N5620 | 1N5622 | Unit |
|---|-----------------|-------------------|--------|--------|--------|--------|----------------------|
| | | S2M | S4M | S6M | S8M | S0M | |
| Average forward current (sine wave) - max. pcb mounted; $T_A = 55^\circ\text{C}$ - max. $L = 3/8"$; $T_L = 55^\circ\text{C}$ | $I_{F(AV)}$ | ←----- 1.0 -----→ | | | | | A |
| | $I_{F(AV)}$ | ←----- 2.0 -----→ | | | | | A |
| I^2t for fusing ($t = 8.3\text{ms}$) max. | I^2t | ←----- 5.0 -----→ | | | | | A^2S |
| Forward voltage drop max. @ $I_F = 1.0\text{A}$, $T_j = 25^\circ\text{C}$ | V_F | ←----- 1.1 -----→ | | | | | V |
| Reverse current max. @ V_{RWM} , $T_j = 25^\circ\text{C}$ | I_R | ←----- 0.5 -----→ | | | | | μA |
| @ V_{RWM} , $T_j = 100^\circ\text{C}$ | I_R | ←----- 25 -----→ | | | | | μA |
| Reverse recovery time max. 0.5A I_F to 1.0A I_R . Recovers to 0.25A I_{RR} . | t_{rr} | ←----- 2.0 -----→ | | | | | μS |
| Junction capacitance typ. @ $V_R = 5\text{V}$, $f = 1\text{MHz}$ | C_j | ←----- 23 -----→ | | | | | pF |
| Thermal resistance - junction to lead Lead length = 0.375" | $R_{\theta JL}$ | ←----- 36 -----→ | | | | | $^\circ\text{C/W}$ |
| Lead length = 0" | $R_{\theta JL}$ | ←----- 7 -----→ | | | | | $^\circ\text{C/W}$ |
| Thermal resistance - junction to amb. on 0.06" thick pcb. 1 oz. copper. | $R_{\theta JA}$ | ←----- 95 -----→ | | | | | $^\circ\text{C/W}$ |

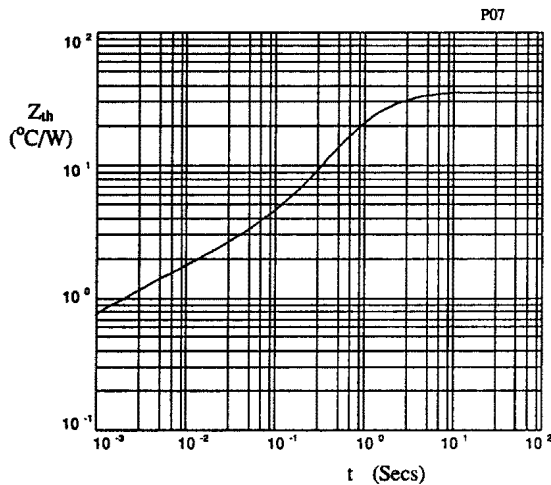


Fig 1. Transient thermal impedance characteristic.

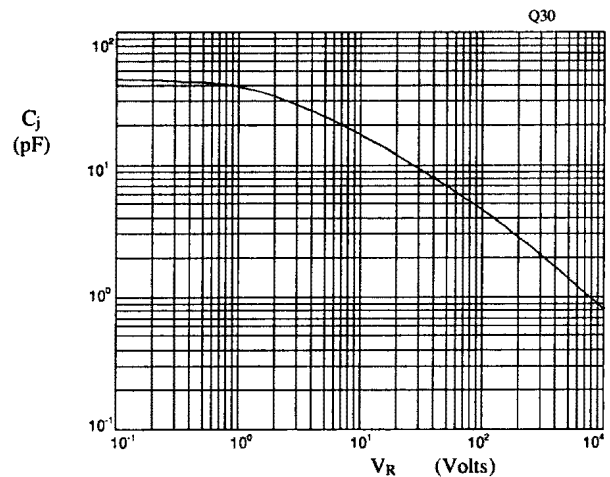


Fig 2. Typical junction capacitance as a function of reverse voltage.

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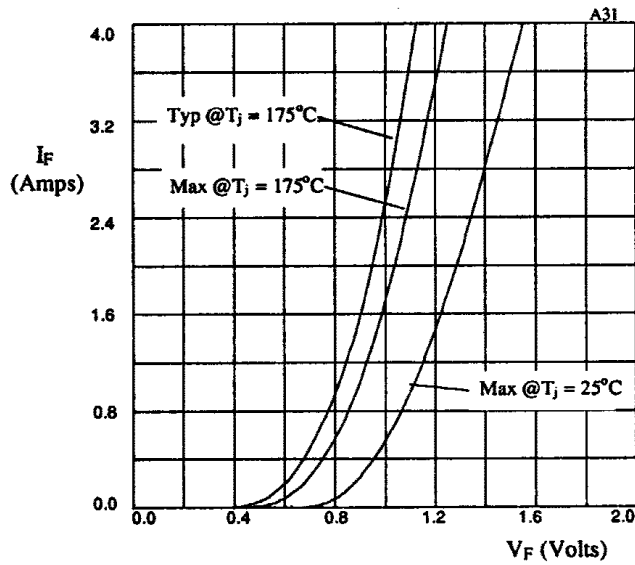


Fig 3. Forward voltage drop as a function of forward current.

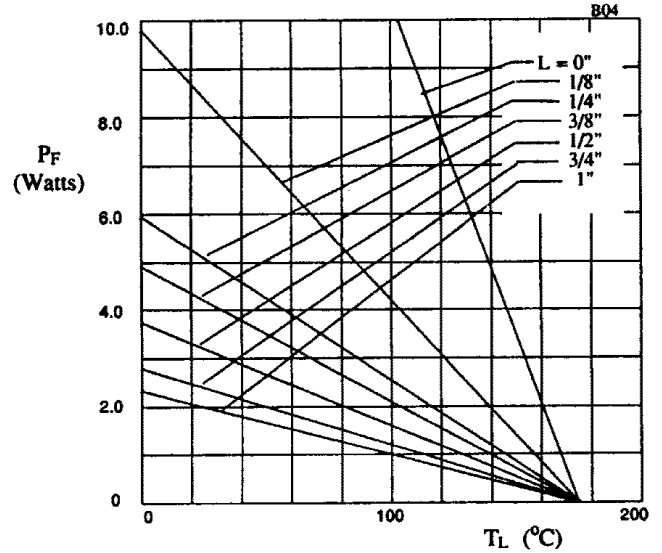


Fig 4. Maximum power versus lead temperature.

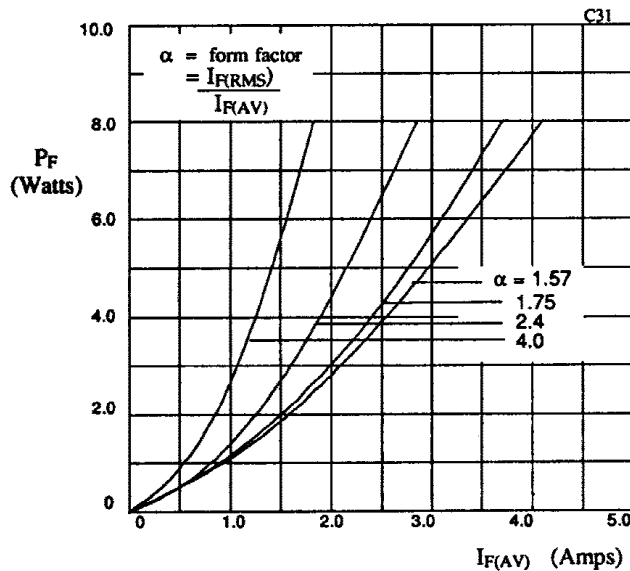


Fig 5. Forward power dissipation as a function of forward current, for sinusoidal operation.

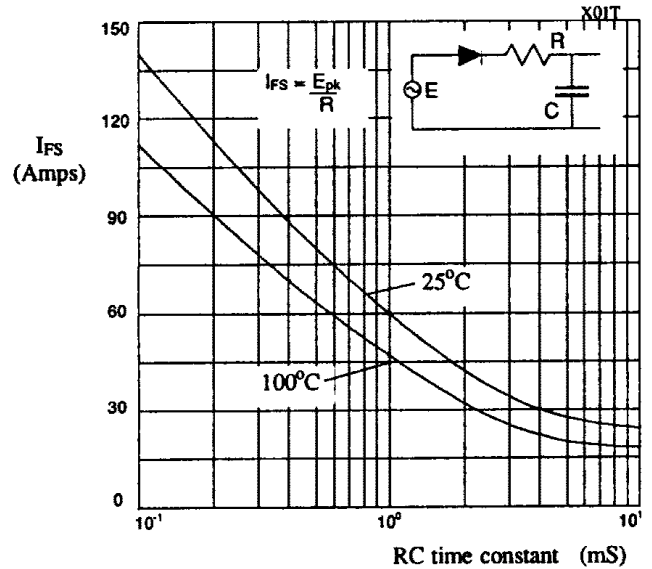


Fig 6. Maximum ratings for capacitive loads.

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