

**ELECTRICAL CHARACTERISTICS** (@ 25°C unless otherwise specified)

	Symbol	1N5802	1N5804	1N5806	Unit
Average forward current max. (pcb mounted; $T_A = 55^\circ\text{C}$ ) for sine wave for square wave ( $d = 0.5$ )	$I_{F(AV)}$	←————— 1.3 —————→		←—————→	A
	$I_{F(AV)}$	←————— 1.4 —————→		←—————→	A
Average forward current max. ( $T_L = 55^\circ\text{C}$ ; $L = 3/8''$ ) for sine wave for square wave	$I_{F(AV)}$	←————— 3.1 —————→		←—————→	A
	$I_{F(AV)}$	←————— 3.3 —————→		←—————→	A
$I^2t$ for fusing ( $t = 8.3\text{mS}$ ) max.	$I^2t$	←————— 10.0 —————→		←—————→	$\text{A}^2\text{S}$
Forward voltage drop max. @ $I_F = 1.0\text{A}$ , $T_j = 25^\circ\text{C}$	$V_F$	←————— 0.875 —————→		←—————→	V
Reverse current max. @ $V_{RWM}$ , $T_j = 25^\circ\text{C}$ @ $V_{RWM}$ , $T_j = 100^\circ\text{C}$	$I_R$	←————— 1.0 —————→		←—————→	$\mu\text{A}$
	$I_R$	←————— 50 —————→		←—————→	$\mu\text{A}$
Reverse recovery time max. 1.0A $I_F$ to 1.0A $I_R$ . Recovers to 0.1A $I_{RR}$ .	$t_{rr}$	←————— 25 —————→		←—————→	nS
Junction capacitance typ. @ $V_R = 5\text{V}$ , $f = 1\text{MHz}$	$C_j$	←————— 25 —————→		←—————→	$\rho\text{F}$

**THERMAL CHARACTERISTICS**

	Symbol	1N5802	1N5804	1N5806	Unit
Thermal resistance - junction to lead Lead length = 0.75"	$R_{\theta JL}$	←————— 36 —————→		←—————→	$^\circ\text{C/W}$
Thermal resistance - junction to amb. on 0.06" thick pcb. 1 oz. copper.	$R_{\theta JA}$	←————— 100 —————→		←—————→	$^\circ\text{C/W}$

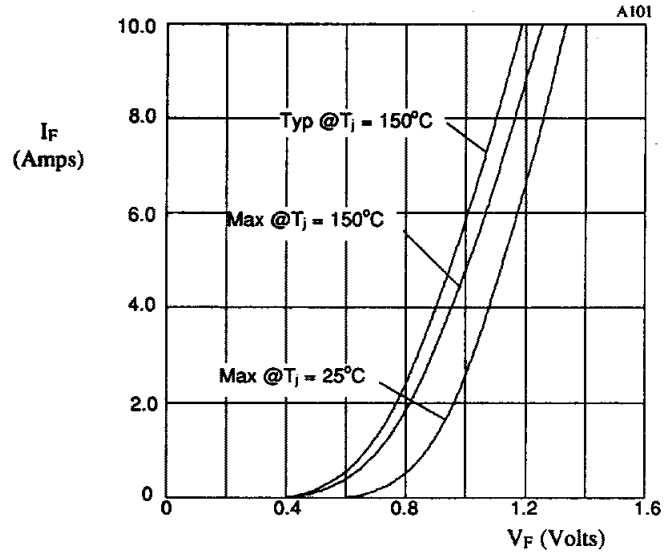


Fig 1. Forward voltage drop as a function of forward current.

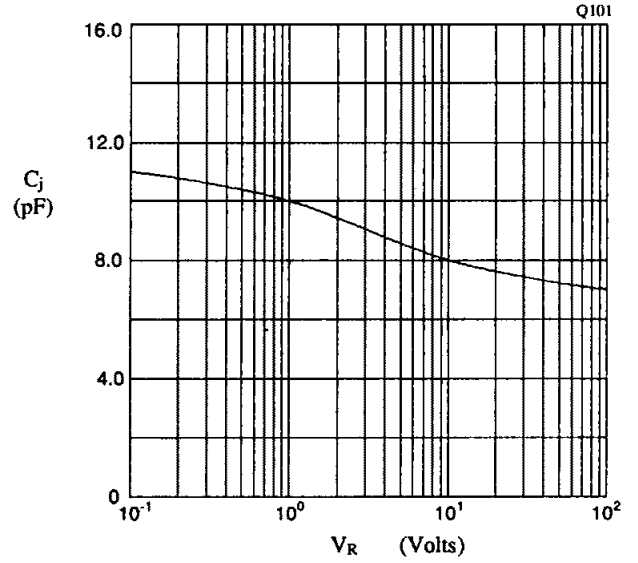


Fig 2. Typical junction capacitance as a function of reverse voltage.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Semtech:](#)

[1N5802](#) [1N5806](#) [1N5804](#)