

January 7, 1998

ELECTRICAL CHARACTERISTICS (@ 25°C unless otherwise specified)

	Symbol	1N6076 3FF05	1N6077 3FF10	1N6078 3FF15	Unit
Average forward current max. (pcb mounted; $T_A = 55^\circ\text{C}$) for sine wave	$I_{F(AV)}$	1.30			A
for square wave ($d = 0.5$)	$I_{F(AV)}$	1.40			A
Average forward current max. $T_L = 70^\circ\text{C}; L = 0"$ $T_L = 55^\circ\text{C}; L = 3/8"$ for sine wave	$I_{F(AV)}$	6.0			A
for square wave	$I_{F(AV)}$	3.0			A
	$I_{F(AV)}$	3.1			A
I^2t for fusing ($t = 8.3\text{ms}$) max.	I^2t	5.1			A ² S
Forward voltage drop max. @ $I_F = 3.0\text{A}$, $T_j = 25^\circ\text{C}$	V_F	1.2			V
Reverse current max. @ V_{RWM} , $T_j = 25^\circ\text{C}$	I_R	5.0			μA
@ V_{RWM} , $T_j = 100^\circ\text{C}$	I_R	100			μA
Reverse recovery time 0.5A I_F to 1.0A I_R . Recovers to 0.25A I_{RR} .	t_{rr}	30			nS
Junction capacitance typ. @ $V_R = 5\text{V}$, $f = 1\text{MHz}$	C_j	60			pF

THERMAL CHARACTERISTICS

	Symbol	1N6076 3FF05	1N6077 3FF10	1N6078 3FF15	Unit
Thermal resistance - junction to lead Lead length = 0.0"	$R_{\theta JL}$	8.5			$^\circ\text{C/W}$
Lead length = 0.375"	$R_{\theta JL}$	25			$^\circ\text{C/W}$
Thermal resistance - junction to amb. on 0.06" thick pcb. 1 oz. copper.	$R_{\theta JA}$	90			$^\circ\text{C/W}$