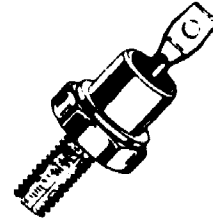


1N3879 thru 1N3883

**FAST RECOVERY
POWER RECTIFIERS**
50-400 VOLTS
6 AMPERES



*** MAXIMUM RATINGS**

Rating	Symbol	1N3879	1N3880	1N3881	1N3882	1N3883	Unit	
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	300	400	Volts	
Working Peak Reverse Voltage	V_{RWM}							
DC Blocking Voltage	V_R							
Non-Repetitive Peak Reverse Voltage	V_{RSM}	75	150	250	350	450	Volts	
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	210	280	Volts	
Average Rectified Forward Current (Single phase, resistive load, $T_C = 100^\circ\text{C}$)	I_O	6.0						Amps
Non-Repetitive Peak Surge Current (surge applied at rated load conditions)	I_{FSM}	200 (one cycle)						Amps
Operating Junction Temperature Range	T_J	-65 to +150						$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to +175						$^\circ\text{C}$

THERMAL CHARACTERISTICS

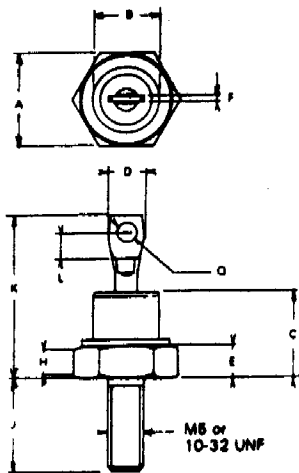
Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Case	$R_{\theta JC}$	3.0	$^\circ\text{C}/\text{W}$

*** ELECTRICAL CHARACTERISTICS**

Characteristic	Symbol	Min	Typ	Max	Unit
Instantaneous Forward Voltage ($I_F = 19 \text{ Amp}$, $T_J = 150^\circ\text{C}$)	V_F	-	1.05	1.2	Volts
Forward Voltage ($I_F = 6.0 \text{ Amp}$, $T_C = 25^\circ\text{C}$)	V_F	-	0.90	1.2	Volts
Reverse Current (rated dc voltage) $T_C = 25^\circ\text{C}$	I_R	-	10	15	μA
$T_C = 100^\circ\text{C}$		-	0.5	1.0	mA

*** REVERSE RECOVERY CHARACTERISTICS**

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Recovery Time - Soft Recovery = 1.0 Amp to $V_R = 30 \text{ Vdc}$, Figure 16) ($I_{FM} = 36 \text{ amp}$, $dI/dt = 25 \text{ A}/\mu\text{s}$, Figure 17)	t_{rr}	-	150 200	200 300	ns
Reverse Recovery Current ($I_F = 1.0 \text{ Amp}$ to $V_R = 30 \text{ Vdc}$, Figure 16)	$I_{RM(REC)}$	-	-	4.0	Amp



	MILLIMETERS		INCHES	
QIM	MIN	MAX	MIN	MAX
A	10.77	11.10	0.424	0.437
B	-	10.77	-	0.424
C	-	10.29	-	0.405
D	-	6.35	-	0.250
E	1.91	4.45	0.075	0.176
F	0.80	-	0.023	-
H	1.50	-	0.060	-
J	10.72	11.51	0.422	0.453
K	-	20.32	-	0.800
L	2.00	-	0.078	-
Q	1.50	-	0.060	-

DO-4

