

**1N3879 THRU 1N3883  
6 AMP  
FAST RECOVERY RECTIFIER  
50-400 VOLTS**



14830 Valley View Avenue  
La Mirada, California 90638  
(213) 921-9660  
TWX 910-583-4807  
FAX 213-921-2396

**CASE STYLE DO-4**

**FEATURES**

- FAST RECOVERY 100 NSEC MAX.
  - PIV TO 400 VOLTS
  - LOW REVERSE LEAKAGE
  - HERMETICALLY SEALED
  - SINGLE CHIP CONSTRUCTION
  - HIGH SURGE RATING 150 AMPS
  - LOW THERMAL RESISTANCE
- FOR REVERSE POLARITY ADD "R" TO PART NUMBER

**MAXIMUM RATINGS**

Rating	Symbol	Value	Unit
Peak Repetitive Reverse Voltage and DC Blocking Voltage	$V_{RM}$ (rep) $V_R$	50 100 200 300 400	Volts
RMS Reverse Voltage	$V_r$	35 70 140 210 280	Volts
Half Wave Rectified Forward Current, Averaged Over Full Cycle (Resistive Load, 60Hz, Sine Wave, $T_A = 55^\circ\text{C}$ )	$I_o$	6	Amps
Peak Repetitive Forward Current ( $T_A = 55^\circ\text{C}$ , 8.3 ms Pulse, Allow Junction to Reach Equilibrium Between Pulses)	$I_{FM}$ (rep)	50	Amps
Peak Surge Current ( $T_A = 55^\circ\text{C}$ , Superimposed on Rated Current at Rated Voltage, 8.3 ms Pulse)	$I_{FM}$ (surge)	150	Amps
Operating and Storage Temperature	$T_J, T_{stg}$	-65 to +175	$^\circ\text{C}$

**THERMAL CHARACTERISTICS**

Characteristics	Symbol	Max	Unit
Thermal Resistance, Junction to Case	$R_{\theta JC}$	3	$^\circ\text{C}/\text{W}$

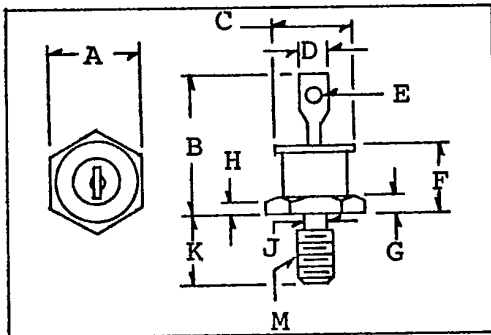
**ELECTRICAL CHARACTERISTICS**

Characteristics	Symbol	Value	Unit
Max Full Cycle Forward Voltage Drop, Averaged Over Full Cycle ( $I_O$ (Max), 60 Hz. Square Wave, $T_A = 55^\circ\text{C}$ )	$V_{F(AV)}$	---	Vdc
Max Instantaneous Forward Drop ( $I_F = 6$ Adc, $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse) ( $I_F = 19$ Adc, $T_A = 150^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)	$V_F$	1.4 1.5	Vdc
Max Full Cycle Reverse Leakage Current, Averaged Over Full Cycle (Rated $V_R$ , 60Hz. Square Wave, $T_A = 100^\circ\text{C}$ )	$I_{R(AV)}$	1	mA
Max Reverse Leakage Current (Rated $V_R$ , $T_A = 25^\circ\text{C}$ )	$I_R$	.015	mA
Max Junction Capacitance ( $V_R = 10$ V, $T_A = 25^\circ\text{C}$ )	$C_J$	100	pf

**REVERSE RECOVERY CHARACTERISTICS**

Characteristics	Symbol	Min	Typ	Max	Unit
Reverse Recovery Time ( $I_F = 1.0$ Amp to $V_R = 30$ Vdc.)	$t_{rr}$	---	100	200	ns

**PHYSICAL DIMENSIONS**



**KEY TO DIMENSIONS:**

- (Inches)
- A = .424 - .437
  - B = .800 MAX.
  - C = .424 MAX.
  - D = .250 MAX.
  - E = .060 MIN.
  - F = .405 MAX.
  - G = .075 - .175
  - H = .060 MIN.
  - J = .163 - .189
  - K = .422 - .453
  - M = 10-32 UNF-2A

**TYPICAL OPERATING CURVES**

