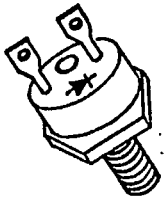


5R6/61 THRU 15R6/61**50 AMP****EPION II HIGH SPEED RECTIFIER****50-150 VOLTS**

MILITARY GRADE REPLACEMENT FOR COMMERCIAL DO-5

T-03-21

SSD II14830 Valley View Avenue
La Mirada, California 90638
(213) 921-9660
TWX 910-583-4807
FAX 213-921-2396**CASE STYLE T****2 PIN TO-61****FEATURES**

- ISOLATED PACKAGE
- RADIATION TOLERANT
- ULTRA FAST RECOVERY 50 NSEC MAX
- REVERSE VOLTAGE TO 150 VOLTS
- VERY LOW FORWARD VOLTAGE DROP 500MV AVERAGE
- LOW REVERSE LEAKAGE
- HERMETICALLY SEALED/SINGLE CHIP CONSTRUCTION
- 200°C OPERATING, GOLD EUTECTIC DIE ATTACH, ULTRASONIC ALUMINUM WIRE BONDS

MAXIMUM RATINGS

Rating		Symbol	Value	Unit
Peak Repetitive Reverse Voltage and DC Blocking Voltage	5R6/61 7R6/61 10R6/61 12R6/61 15R6/61	$V_{RM} (rep)$ V_R	+ 50 70 100 125 150	Volts
RMS Reverse Voltage.	5R6/61 7R6/61 10R6/61 12R6/61 15R6/61	V_r	35 50 70 90 110	Volts
Half Wave Rectified Forward Current, Averaged Over Full Cycle (Resistive Load, 60Hz, Sine Wave, $T_C = 55^\circ C$)		I_0	50	Amps
Peak Repetitive Forward Current ($T_C = 55^\circ C$, 8.3 ms Pulse, Allow Junction to Reach Equilibrium Between Pulses)		$I_{FM} (rep)$	150	Amps
Peak Surge Current ($T_C = 55^\circ C$, Superimposed on Rated Current at Rated Voltage, 8.3 ms Pulse)		$I_{FM} (surge)$	450	Amps
Operating and Storage Temperature		T_J, T_{stg}	-65 to +200	°C

THERMAL CHARACTERISTICS

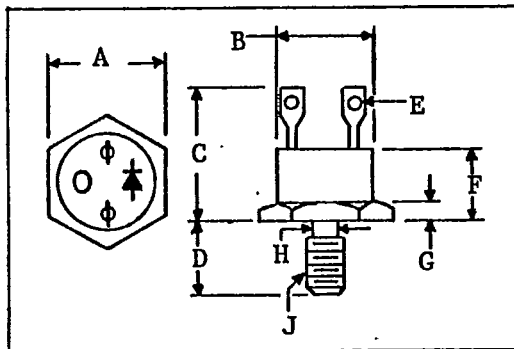
Characteristics	Symbol	Max	Unit
Thermal Resistance, Junction to Case	$R_{\theta JC}$	1.0	°C/W

Characteristics	Symbol	Value	Unit
Max Full Cycle Forward Voltage Drop, Averaged Over Full Cycle (I_O (Max), 60 Hz Square Wave, $T_C = 55^\circ\text{C}$)	$V_{F(AV)}$	0.5	Vdc
Max Instantaneous Forward Drop ($I_F = 50$ Adc, $T_C = 25^\circ\text{C}$, 300 μs Pulse)	V_F	1.0	Vdc
Max Reverse Leakage Current (Rated V_R , $T_C = 100^\circ\text{C}$)	$I_{R(AV)}$	2.5*	m Adc
Max Reverse Leakage Current (Rated V_R , $T_C = 25^\circ\text{C}$)	I_R	250*	μAdc
Max Junction Capacitance ($V_R = 10$ V, $T_C = 25^\circ\text{C}$)	C_J	250	pf

REVERSE RECOVERY CHARACTERISTICS *LOWER LEAKAGE DEVICES AVAILABLE FROM FACTORY

Characteristics	Symbol	Min	Typ	Max	Unit
Reverse Recovery Time ($I_F = 500\text{ma}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{ma}$)	t_{rr}	---	40	50	ns

PHYSICAL DIMENSIONS



KEY TO DIMENSIONS:

- (Inches)
- A = .667 - .687
 - B = .570 - .610
 - C = .640 - .875
 - D = .422 - .455
 - E = .047 - .072 (Diameter)
 - F = .325 - .460
 - G = .090 - .150
 - H = .220 - .249 (Diameter)
 - J = $\frac{1}{4}$ - 28 UNF-2A

TYPICAL OPERATING CURVES

