

SHA2604R THROUGH SHA2607R

30 AMP

ULTRA FAST RECOVERY
COMMON ANODE
CENTERTAP RECTIFIER

200 - 500 VOLTS

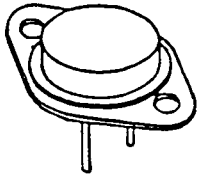
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SSDI

14849 FIRESTONE BLVD.
LA MIRADA, CA 90638
TEL: (213) 921-9660
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CASE STYLE

JEDEC TO-3 with .060 PINS



FEATURES

- ▶ COMBINED PERFORMANCE OF TWO DO-4 DISCRETES
- ▶ PIV TO 500 VOLTS
- ▶ ULTRA FAST RECOVERY. 35ns TYPICAL
- ▶ HERMETICALLY SEALED
- ▶ SUPERIOR THERMAL RESISTANCE
- ▶ GOLD EUTECTIC DIE ATTACH. NO SOLDER USED
- ▶ ALUMINUM ULTRASONIC WIRE BOND
- ▶ REPLACES UES2604 THROUGH UES2606

MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage Per Leg and DC Blocking Voltage Per Leg SHA2604 SHA2605 SHA2606 SHA2607	VRM(rep) VR	200 300 400 500	Volts
RMS Reverse Voltage Per Leg SHA2604 SHA2605 SHA2606 SHA2607	Vr	140 210 280 350	Volts
Half Wave Rectified Forward Current Averaged Over Full Cycle (Resistive Load, 60Hz, Sine Wave, TC=55 °C)	IO	30	Amps
Peak Repetitive Forward Current (TC=55 °C, 8.3ms Pulse, Allow Junction to Reach Equilibrium Between Pulses)	IFM(rep)	120	Amps
Peak Surge Current (TC=55 °C, 8.3ms Pulse, Superimposed on Rated Current at Rated Voltage)	IFM(surge)	350	Amps
Operating and Storage Temperature	TJ, Tstg	-65 to +200	°C

THERMAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	VALUE	UNIT
Thermal Resistance, Junction to Case Both legs tied together	RθJC	1.6	°C/W

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	VALUE	UNITS
Max Full Cycle Forward Voltage Drop, Averaged Over Full Cycle Per Leg ($I_{O(MAX)}$, 60Hz, Square Wave, $T_C=55^\circ C$)	VF(AV)	0.65	Vdc
Max Instantaneous Forward Voltage Drop Per Leg ($I_F=15$ Adc, $T_J = 25^\circ C$, 300 μs Pulse) ($I_F=15$ Adc, $T_J = 125^\circ C$, 300 μs Pulse)	VF	1.5 1.4	Vdc
Max Full Cycle Reverse Leakage Current Averaged Over Full Cycle Per Leg (80% of Rated VR, 60 Hz, Square Wave, $T_C= 100^\circ C$)	IR(AV)	5	mAdc
Max Reverse Leakage Current Per Leg (80% of Rated VR, $T_C=25^\circ C$)	IR	50	μ Adc
Max Junction Capacitance Per Leg (VR = 10V, $T_C=25^\circ C$)	CJ	250	pf

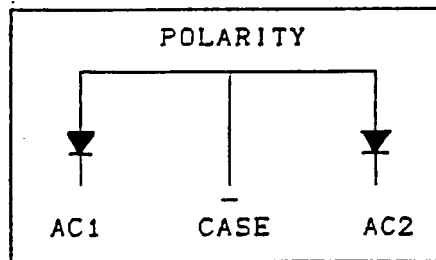
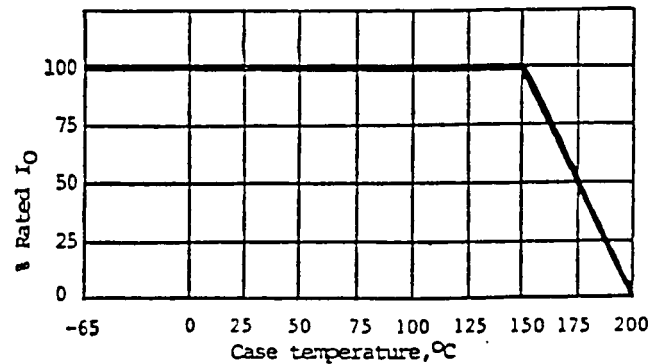
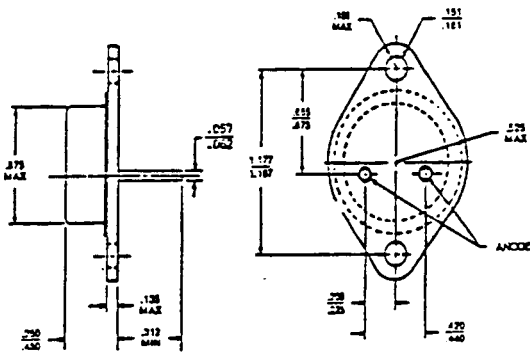
REVERSE RECOVERY CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MIN	TYP	MAX	UNIT
Reverse Recovery Time Per Leg ($I_F=500$ mA, $I_R=1$ A, $I_{RR}=250$ mA)	trr	--	35	50	ns

PHYSICAL DIMENSIONS

TYPICAL OPERATING CURVES

CASE IS CATHODE



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