

SHA396A thru SHA396D

15 AMP

HYPER FAST POSITIVE
CENTERTAP RECTIFIER

200-500 VOLTS

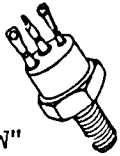
SSDI

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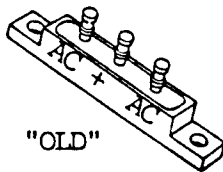
CASE STYLE

JEDEC TO-59

ALL TERMINALS ISOLATED FROM CASE



"NEW"



"OLD"

FEATURES

- ▶ REPLACES CONVENTIONAL POTTED ASSEMBLIES
- ▶ SUPERIOR THERMAL RESISTANCE
- ▶ ISOLATED PACKAGE
- ▶ HYPER FAST RECOVERY 30ns MAX
- ▶ PIV TO 500 VOLTS
- ▶ LOW REVERSE LEAKAGE
- ▶ HERMETICALLY SEALED
- ▶ GOLD EUTECTIC DIE ATTACH, ALUMINUM
- ▶ ULTRASONIC WIRE BOND, NO SOLDER USED

MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage Per Leg and DC Blocking Voltage Per Leg	VRM(rep) VR		Volts
SHA396A		200	
SHA396B		300	
SHA396C		400	
SHA396D		500	
RMS Reverse Voltage Per Leg	Vr		Volts
SHA396A		140	
SHA396B		210	
SHA396C		280	
SHA396D		350	
Half Wave Rectified Forward Current Averaged Over Full Cycle (Resistive Load, 60Hz, Sine Wave, TC=55°C)	IO	15	Amps
Peak Repetitive Forward Current (TC=55°C, 8.3ms Pulse, Allow Junction to Reach Equilibrium Between Pulses)	IFM(rep)	50	Amps
Peak Surge Current (TC=55°C, 8.3ms Pulse, Superimposed on Rated Current at Rated Voltage)	IFM(surge)	150	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	4.0	°C/W

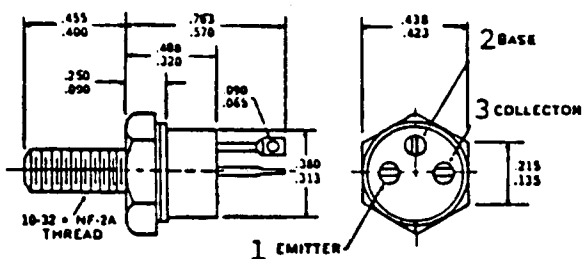
ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	VALUE	UNITS
Max Full Cycle Forward Voltage Drop, Averaged Over Full Cycle Per Leg (10(MAX), 60Hz, Square Wave, TC=55°C)	VF(AV)	0.75	Vdc
Max Instantaneous Forward Voltage Drop Per Leg (IF= 15 Adc, TC = 25°C, 300 μs Pulse)	VF	1.5	Vdc
Max Full Cycle Reverse Leakage Current Averaged Over Full Cycle Per Leg (Rated VR, 60Hz, Square Wave, TC= 100°C)	IR(AV)	50	mAdc
Max Reverse Leakage Current Per Leg (Rated VR, TC=25°C)	IR	5	μAdc
Max Junction Capacitance Per Leg (VR = 10V, TC=25°C)	CJ	15	pf

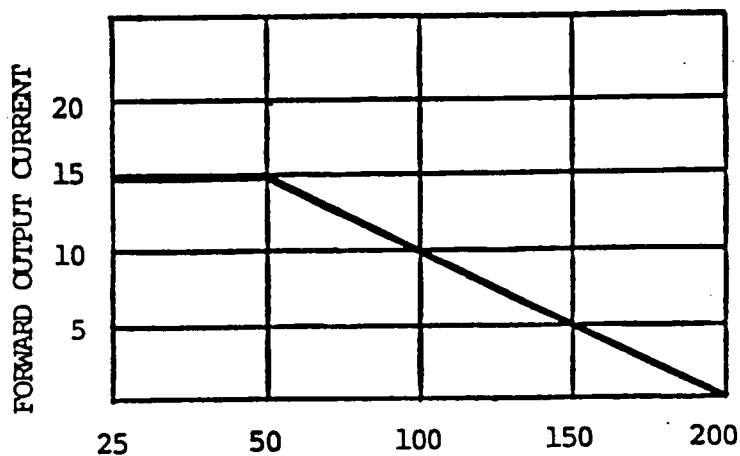
REVERSE RECOVERY CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MIN	TYP	MAX	UNIT
Reverse Recovery Time Per Leg (IF=500mA, IR=1A, IRR=250mA)	trr	--	25	30	ns

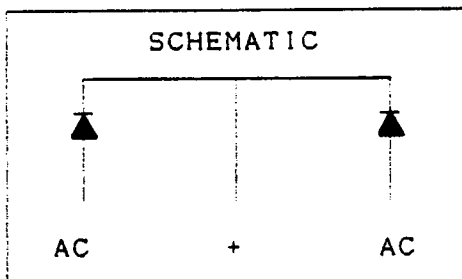
PHYSICAL DIMENSIONS



TYPICAL OPERATING CURVES



SCHEMATIC



SSDI

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