M & Z M & Z

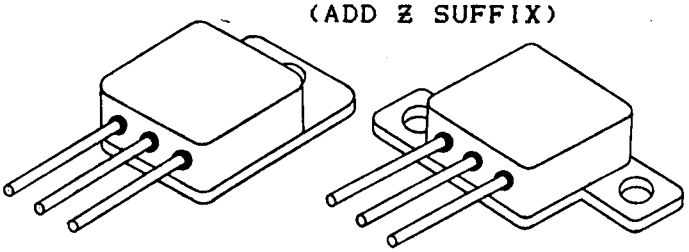
SDR952CT~~/254~~ THROUGH SDR955CT~~/254~~

80 AMP
ULTRA FAST RECOVERY
RECTIFIER
POSITIVE CENTERTAP
200 - 500 VOLTS

SSDI
X00185
14849 FIRESTONE BLVD.
LA MIRADA, CA 90638
TEL: (213) 921-9660
FAX: (213) 921-2396

CASE STYLE

TO-254 "Z"-PACK (ADD Z SUFFIX)



FEATURES

- ISOLATED LOW PROFILE PACKAGE
- HERMETICALLY SEALED
- ULTRA FAST RECOVERY 35nsec MAX
- REVERSE VOLTAGE TO 500 VOLTS
- LOW REVERSE LEAKAGE, LOW CAPACITANCE
- 200 °C OPERATING, EUTECTIC DIE ATTACH

MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage Per Leg and DC Blocking Voltage Per Leg (IR = 100 µA)	VRM(rep) VR		Volts
SDR952CT~~/254~~ M & Z		200	
SDR953CT~~/254~~ M & Z		300	
SDR954CT~~/254~~ M & Z		400	
SDR955CT~~/254~~ M & Z		500	
RMS Reverse Voltage Per Leg	Vr		Volts
SDR952CT~~/254~~ M & Z		140	
SDR953CT~~/254~~ M & Z		210	
SDR954CT~~/254~~ M & Z		280	
SDR955CT~~/254~~ M & Z		350	
Half Wave Rectified Forward Current Averaged Over Full Cycle (Resistive Load, 60Hz, Sine Wave, TC=55 °C)	IO	80	Amps
Peak Repetitive Forward Current (TC=55 °C, 8.3ms Pulse, Allow Junction to Reach Equilibrium Between Pulses)	IFM(rep)	300	Amps
Peak Surge Current (TC=55 °C, 8.3ms Pulse, Superimposed on Rated Current at Rated Voltage)	IFM(surge)	900	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	0.75	°C/W

NOTE: All Specifications Subject to Change Without Notice

ELECTRICAL CHARACTERISTICS

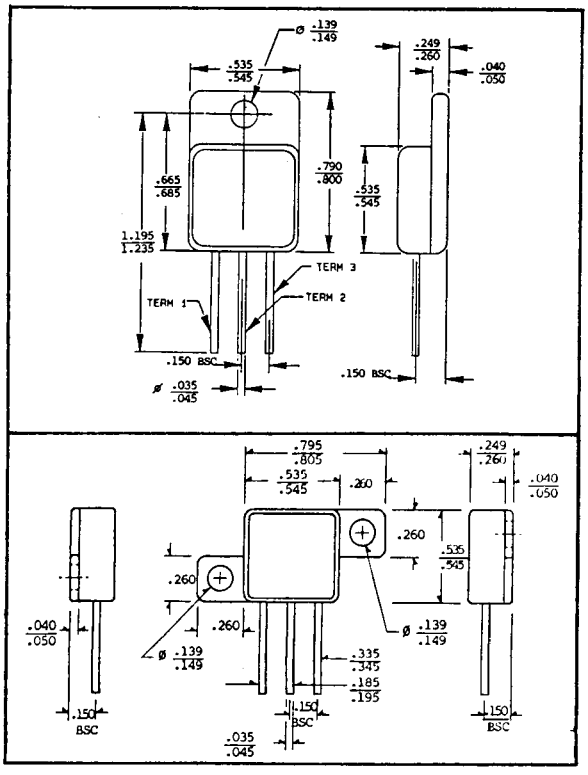
CHARACTERISTIC	SYMBOL	VALUE	UNITS
Max Full Cycle Forward Voltage Drop, Averaged Over Full Cycle Per Leg (IO(MAX),60Hz, Square Wave, TC=55 °C)	VF(AV)	Ø.85	Volts
Max Instantaneous Forward Voltage Drop * Per Leg (IF=4Ø Adc, TC=25 °C, 3ØØus Pulse)	VF	1.7	Volts
Max Reverse Leakage Current Per Leg * (VR = 8Ø % Rated VR, TC = 1ØØ °C)	IR	5.Ø	mAdc
Max Reverse Leakage Current Per Leg (VR = 8Ø % Rated VR, TC = 25 °C)	IR	5Ø	uAdc
Max Junction Capacitance Per Leg (VR = 1ØV, TC = 25 °C)	CJ	15Ø	pf

*) Pulse Test: Pulse Width = 3ØØ μs, Duty Cycle = 2 %.

REVERSE RECOVERY CHARACTERISTICS

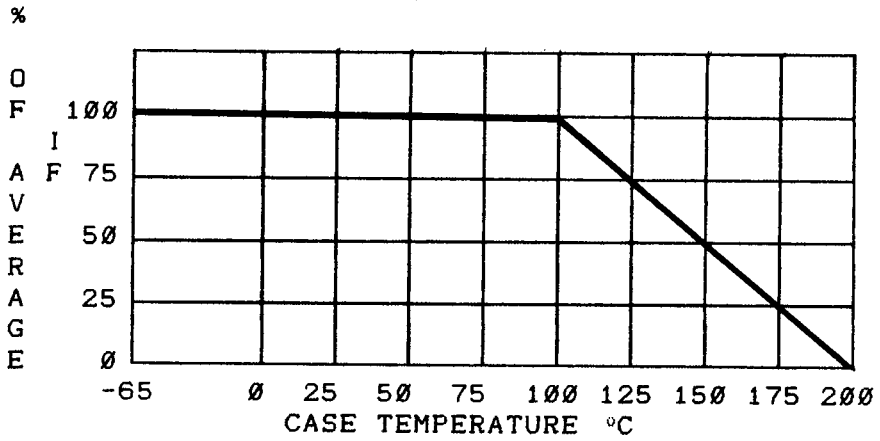
Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Recovery Time Per Leg (IF=5ØØmA, IR=1A, IRR=25ØmA)	trr	-	3Ø	35	ns

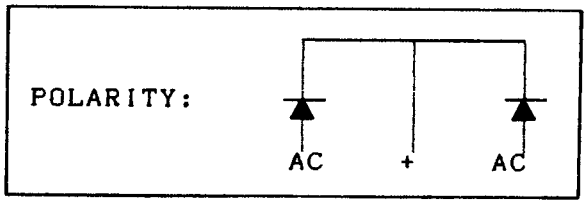
PHYSICAL DIMENSIONS



TYPICAL OPERATING CURVES

MAXIMUM FORWARD CURRENT VS. LEAD TEMP.





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