

SDR627CTM AND SDR627CTZ

40 AMP

**ISOLATED FLAT PACK
ULTRA FAST RECTIFIER
POSITIVE CENTERTAP**

700 VOLTS

SSDI

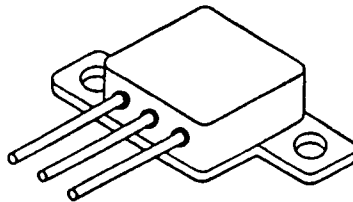
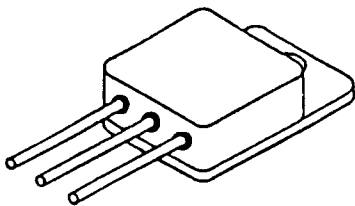
14849 FIRESTONE BLVD.
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CASE STYLE

FEATURES

T0-254(M)

T0-254Z(Z)



- ▶ ISOLATED LOW PROFILE PACKAGE
- ▶ ULTRA FAST RECOVERY 60nsec MAX
- ▶ HIGHER VOLTAGES AVAILABLE
- ▶ 200 °C OPERATING, EUTECTIC DIE ATTACH
- ▶ REVERSE VOLTAGE 700 VOLTS
- ▶ LOW REVERSE LEAKAGE, LOW CAPACITANCE
- ▶ HERMETICALLY SEALED
- ▶ AVAILABLE IN COMMON ANODE (CAM/CAZ) OR DOUBLER (DM/DZ) CONFIGURATION.

MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage Per Leg and DC Blocking Voltage Per Leg (IR = 100µA)	VRM(rep) VR	700	Volts
Half Wave Rectified Forward Current Averaged Over Full Cycle (Resistive Load, 60Hz, Sine Wave, TC=25 °C)	IO	40	Amps
Peak Repetitive Forward Current (TC=55 °C, 8.3ms Pulse, Allow Junction to Reach Equilibrium Between Pulses)	IFM(rep)	80	Amps
Peak Surge Current (TC=55 °C, 8.3ms Pulse, Superimposed on Rated Current at Rated Voltage)	IFM(surge)	400	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	1.0	°C/W

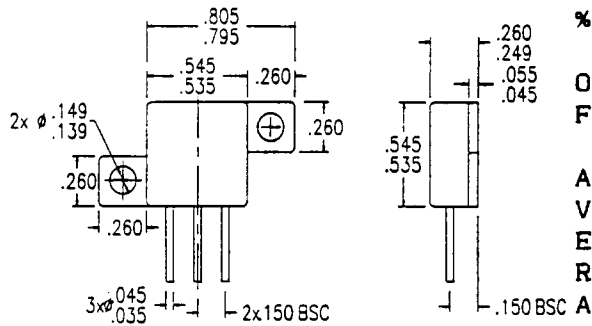
ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	VALUE	UNITS
Max Instantaneous Forward Voltage Drop Per Leg * (IF = 20Adc, TA = 25 °C)	VF	1.7	Volts
Max Instantaneous Forward Voltage Drop Per Leg * (IF = 20Adc, TA = 100 °C)	VF	1.6	Volts
Max Reverse Leakage Current Per Leg * (VR = 600V, TA = 25 °C)	IR	50	μAdc
Max Reverse Leakage Current Per Leg * (VR = 600V, TA = 100 °C)	IR	5.0	mAdc
Max Junction Capacitance Per Leg (VR = 10V, TA = 25 °C)	CJ	150	pf
Max Reverse Recovery Time Per Leg (IF = 500mA, IR = 1A, IRR = 250mA)	trr	60	ns

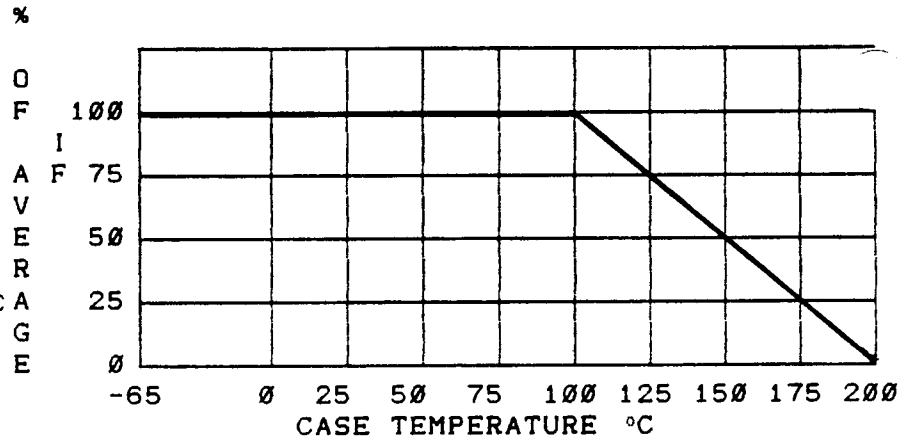
*) Pulse Width = 300 μs. Duty Cycle = 2 %.

PHYSICAL DIMENSIONS T0-254Z(Z)

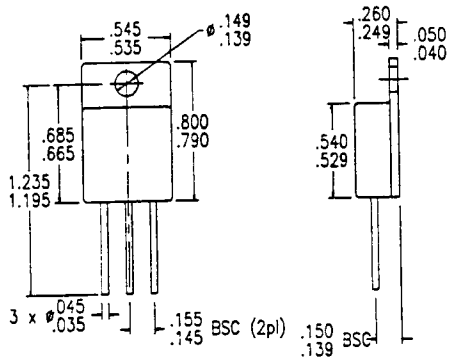
TYPICAL OPERATING CURVES



MAXIMUM FORWARD CURRENT VS. LEAD TEMP.



T0-254(M)



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