

SDR4512M

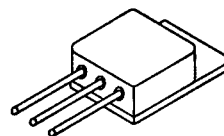
Designer's Data Sheet

FEATURES:

- High Voltage: 1200 Volts Max.
- Ultra Fast Recovery: 80 nsec Maximum
- Higher Surge Ratings available
- Hermetically Sealed
- Gold Eutectic Die Attach available
- Ultrasonic Aluminum Wire Bonds
- TX, TXV and Space Level Screening Available

**45 AMP
1200 VOLTS
80nsec
RECTIFIER**

TO-254



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR4512M	VRRM VRWM VR	1200	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	45	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C)	IFSM	400	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case	RθJC	0.8	°C/W

NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET#: RU0151 A

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SDR4512M

PRELIMINARY



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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA=25°C, 300µs Pulse) (IF = 45 Adc, TA=25°C, 300µs Pulse)	VF	1.7 2.0	Vdc
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA= -55°C, 300µs Pulse) (IF = 25 Adc, TA= 100°C, 300µs Pulse)	VF	1.8 1.6	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300µs pulse minimum)	IR	50	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300µs pulse minimum)	IR	5	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	100	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	80	nsec

CASE OUTLINE: TO-254

PIN 1: CATHODE
PIN 2: ANODE
PIN 3: ANODE

