

SCHOTTKY RECTIFIER

VOLTAGE 40 Volts CURRENT 500 mAmps

FEATURES

- * Low Forward Voltage Drop
- * Guard Ring Construction for Transient Protection
- * High Conductance
- * Also Available in Lead Free Version

MECHANICAL DATA

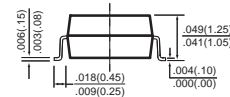
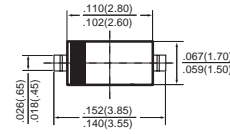
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.01 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



SOD-123



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	B0540W	UNITS
Maximum Repetitive Peak Reverse Voltage	VRRM	40	Volts
Maximum Working Peak reverse Voltage	VRWM		
Maximum DC Blocking Voltage	VR		
RMS Reverse Voltage	VR(RMS)	28	Volts
Average Forward Rectified Current (At rated VR, TL=115°C)	IO	500	mAmps
Peak Forward Surge Current	IFSM	5.5	Amps
Reverse Recovery Time (IF=IR=10mA, IRT=0.1XIR, RL=100Ω)	Trr	4	nS
Capacitance between terminals (VR=1V, f= 1MHz)	CT	170	pF
Power Dissipation	PD	410	mW
Typical Thermal Resistance	RθJA	244	°C/W
Storage Temperature Range	TSTG	-65 to + 150	°C
Voltage Rate of Change	dv / dt	1000	V/uS

ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	B0540W	UNITS
Maximum Instantaneous Forward Voltage	VF	@IF=0.5A	0.510
		@IF=1A	0.62
Maximum Instantaneous Reverse Current	IR	@VR=20V	10
		@VR=40V	20
Minimum Reverse Breakdown Voltage	V(BR)R	@IR=20uA	40

RATING AND CHARACTERISTICS CURVES (B0540W)

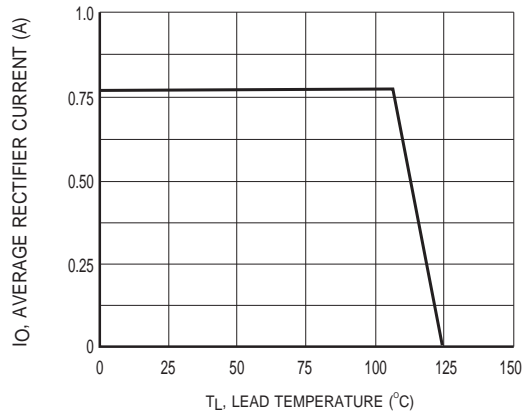


FIG.1 Forward Current Derating Curve

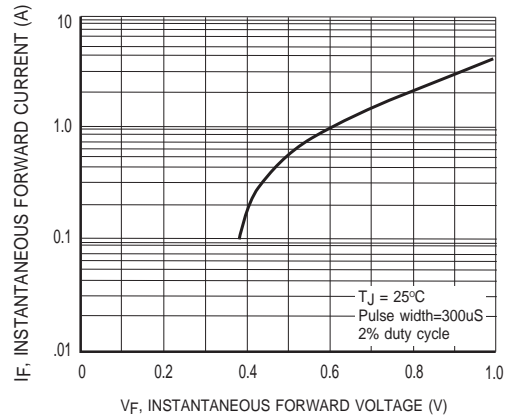


FIG.2 Typical Forward Characteristics

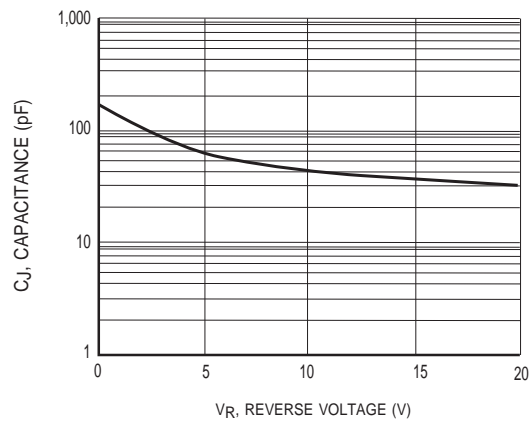


FIG.3 Typ. Junction Capacitance VS. Reverse Voltage

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