



SMALL SIGNAL DIODE

VOLTAGE RANGE 30 Volts

FEATURES

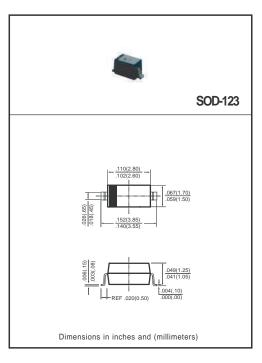
- * Low Forward Voltage Drop
- * Fast Switching Time
- * Surface Mount Package Ideally Suited for Automatic Insertion

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%.



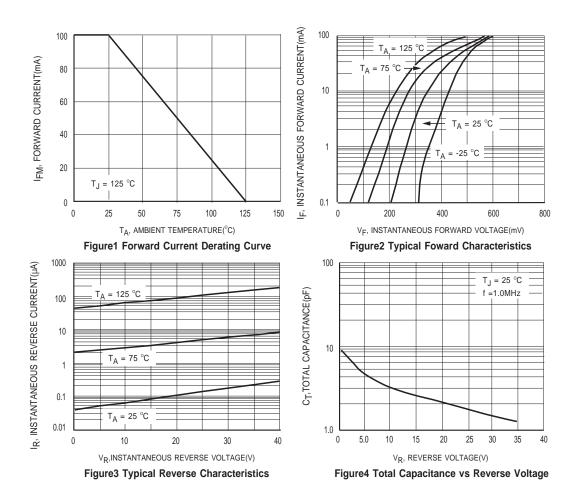
$\textbf{MAXIMUM RATINGS} \ (@\ \textit{TA=25}\ ^{\circ}\textit{C}\ unless\ otherwise\ noted)$

RATINGS	SYMBOL	BAT42W	UNITS
Reverse Breakdown Voltage	V _{(BR)R}	30	Volts
Maximum Repetitive Peak Reverse Voltage Maximum Working Peak reverse Voltage Maximum DC Blocking Voltage	V _{RRM} V _{RWM} V _R	30	Volts
Maximum RMS Voltage	V _{RMS}	21	Volts
Maximum Forward Comtinuous Current	I _{FM}	200	mAmps
Non-Repetitive Peak Forward Surge Current @t<1.0s	I _{FRM}	500	mAmps
Peak Forward Surge Current @<10ms	I _{FSM}	4.0	Amps
Typical Reverse Recovery Time(I _F =I _R =10mA,I _{II} =0.1X _{IR} ,R _L =100)	Trr	5	nS
Typical Junction Capacitance(V _R =1.0V,f=1.0MHz)	СТ	10	pF
Maximum Power Dissipation	PD	200	mW
Typical Thermal Resistance	R JA	500	K/W
Operating and Storage Temperature Range	T _{STG}	-55 to + 125	°C

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

CHARACTERISTICS		SYMBOL	BAT42W	UNITS
Maximum Instantaneous Forward Voltage	@I _F =10mA @I _F =50mA	V _F	0.4 0.65	Volts
Maximum Instantaneous Reverse Current	@V _R =25V	I _R	0.5	μAmps

RATING AND CHARACTERISTICS CURVES (BAT42W)



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