

SMALL SIGNAL DIODE
VOLTAGE RANGE 30 Volts

FEATURES

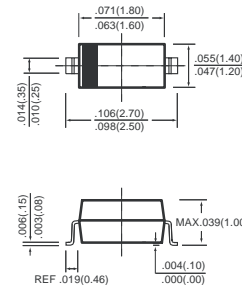
- * Low Forward Voltage Drop
- * Fast Switching Time
- * Surface Mount Package Ideally Suited for Automatic Insertion
- * Also Available in Lead Free Version

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.004 grams



SOD-323



Dimensions in inches and (millimeters)

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%.

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

RATINGS	SYMBOL	BAT43WS	UNITS
Reverse Breakdown Voltage @ I _R =100μA	V _{(BR)R}	30	Volts
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	30	Volts
Maximum Working Peak reverse Voltage	V _{RWM}		
Maximum DC Blocking Voltage	V _R		
Maximum RMS Voltage	V _{RMS}	21	Volts
Maximum Forward Continuous Current	I _{FM}	200	mAmps
Repetitive Peak Forward Current @t<1.0s	I _{FRM}	500	mAmps
Non-Repetitive Peak Forward Surge Current @t<10ms	I _{FSM}	4.0	Amps
Typical Reverse Recovery Time (I _F =I _R =10mA,I _{rr} =0.1xI _R ,R _L =100Ω)	T _{rr}	5	rS
Typical Junction Capacitance (V _R =1.0,f=1.0MHz)	C _T	10	pF
Maximum Power Dissipation (Note 1)	P _D	200	mW
Typical Thermal Resistance	R _{JA}	625	K/W
Operating and Storage Temperature Range	T _J ,T _{STG}	-55 to + 125	°C

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

CHARACTERISTICS	SYMBOL	BAT43WS	UNITS
Maximum Instantaneous Forward Voltage	@ I _F =2mA	0.33	Volts
	@ I _F =15mA	0.45	
Maximum Instantaneous Reverse Current	I _R	0.5	uAmps

Note 1. Part mounted on FR-4 PC board with minimum recommended pad layout.

RATING AND CHARACTERISTICS CURVES (BAT43WS)

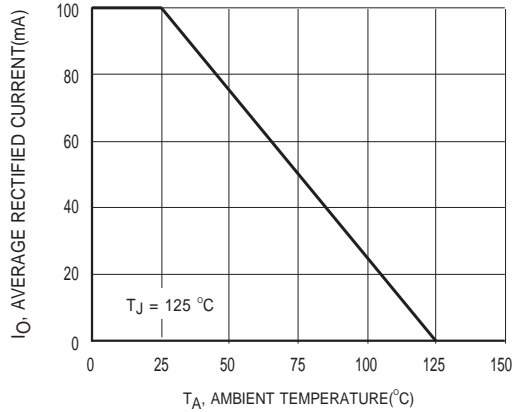


Figure1 Forward Current Derating Curve

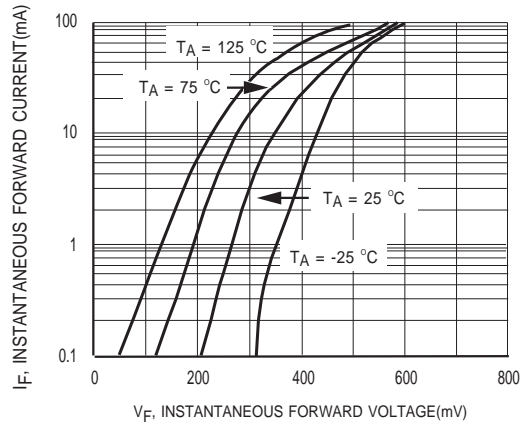


Figure2 Typical Foward Characteristics

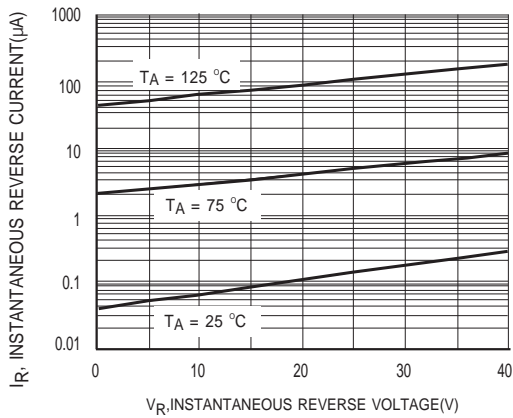


Figure3 Typical Reverse Characteristics

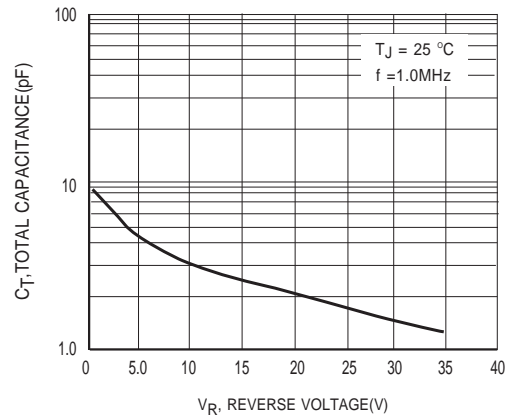


Figure4 Typical Capacitance vs Reverse Voltage

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