



SMALL SIGNAL SCHOTTKY BARRIER DIODES

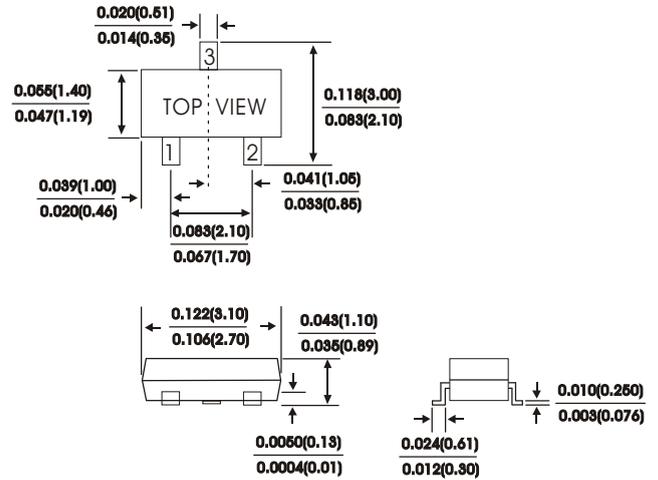
FEATURES:

- These diodes feature very low turn-on voltage and fast switching.
- These devices are protected by a PN junction guard ring against excessive voltage. Such as electrostatic discharges.

MECHANICAL DATA

Case : SOT-23 molded plastic
Weight : approx. 0.008g

SOT-23



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

Characteristic	Symbol	BAS40	BAS40-04	BAS40-05	BAS40-06	Units
Repetitive peak reverse voltage	V _{RRM}			40		Volts
Minimum reverse breakdown voltage with I _R = 10uA	V _{(BR)R}			40		Volts
Forward continuous current at T _{amb} = 25°C	I _F			0.2		Amps
Surge Forward current at t _p < 1S, T _{amb} = 25°C (Per leg)	I _{FSM}			0.6		Amps
Power dissipation at T _{amb} = 25°C	P _{tot}			0.2		mW
Maximum instantaneous forward voltage pulse test t _p < 300us (Per leg)	V _F			0.38 1.00		Volts
Maximum leakage current at V _R = 30V, pulse test t _p < 300us (Per leg)	I _R			0.1		μA
Maximum reverse recovery time (NOTE 1) (Per leg)	T _{RR}			5.0		nS
Maximum total capacitance (NOTE 2)	C _{tot}			5		P _F
Maximum thermal resistance junction to ambient air	R _{thJA}			430		K/W
Operating junction temperature range	T _J			-55to+125		°C
Storage temperature range	T _{Stg}			-55to+150		°C

NOTES:
(1) Reverse Recovery Test CONDITION : I_F = I_R = 10mA, I_{R(REC)} = 1.0mA
(2) Measured at 1MHZ and reverse Voltage of 1.0V



RATINGS AND CHARACTERISTIC CURVES

Device Marking

Item	Marking	Equivalent Circuit diagram
BAS40	43	
BAS40-04	44	
BAS40-05	45	
BAS40-06	46	



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