



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

BAS40  
BAS40-04  
BAS40-05  
BAS40-06

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER DIODES  
VOLTAGE - 40 Volts  
CURRENT - 0.2 Ampere

### FEATURES

- \* For general purpose applications
- \* Low forward voltage drop.
- \* Fast switching time.
- \* Protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge(ESD).

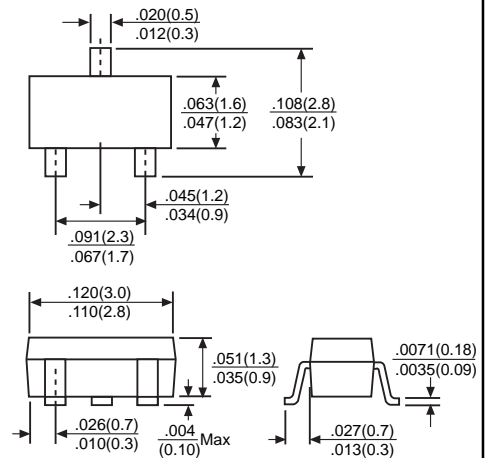
### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated, solderable per MIL-STD-202E, Method 208 guaranteed
- \* Mounting position: Any
- \* Weight: 0.008 grams Approx.

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

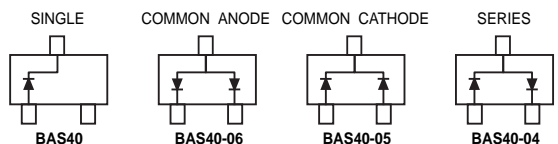
SOT-23



Dimensions in inches and (millimeters)

	SYMBOL	BAS40	BAS40-04	BAS40-05	BAS40-06	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>			40		Volts
Maximum RMS Voltage	V <sub>RMS</sub>			28		Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>			40		Volts
Maximum Average Forward Rectified Current at T <sub>A</sub> =25°C	I <sub>O</sub>			0.2		Amps
Peak Forward Surge Current at t=1.0S	I <sub>FSM</sub>			0.6		Amps
Maximum Instantaneous Forward Voltage	V <sub>F</sub>		1.0 @ I <sub>F</sub> =40mA			Volts
			0.38 @ I <sub>F</sub> =1mA			
Maximum DC Reverse Current at T <sub>A</sub> =25°C, V <sub>R</sub> =25V	I <sub>R</sub>			1.0		μAmps
Typical Junction Capacitance (Note)	C <sub>J</sub>			5.0		pF
Storage Operating Temperature Range	T <sub>J</sub> , T <sub>STG</sub>			-55 to +150		°C

NOTES : Measured at 1 MHz and applied reverse voltage of 0 volts.



Pin Configuration (Top View)

# RATING AND CHARACTERISTIC CURVES (BAS40, BAS40-04/05/06)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

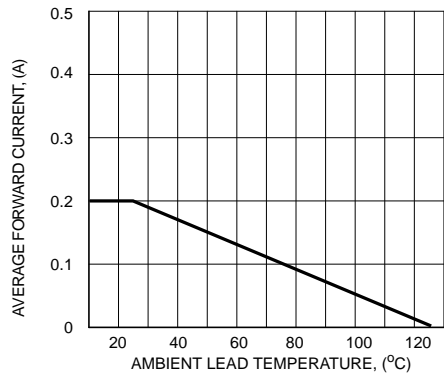


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

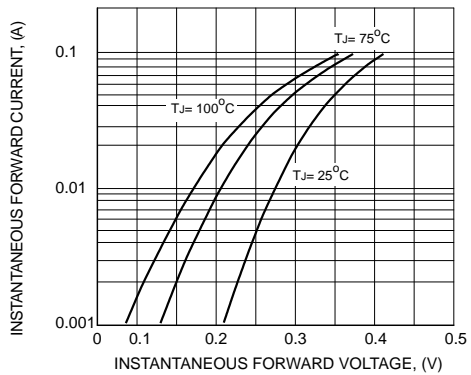


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

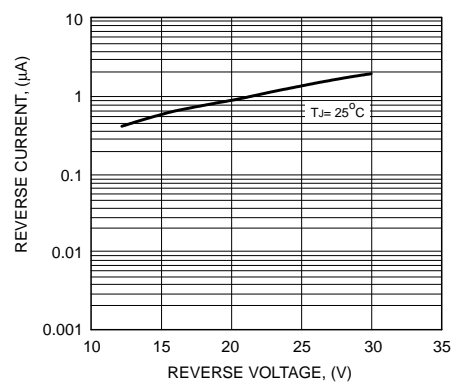


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

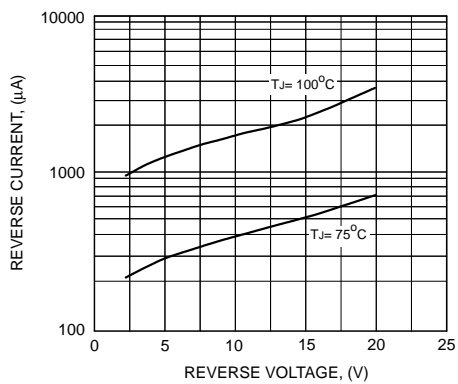


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

