

## SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 75-200 Volts

**POWER** 350 mWatts

**PACKAGE** SOT-23

### FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance

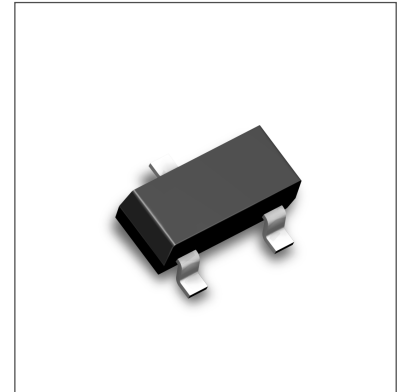
### MECHANICAL DATA

Case: SOT-23, Plastic

Terminals: Solderable per MIL-STD-202, Method 208

Approx. Weight: 0.008 gram

Marking: A6, A8, A80, A82



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

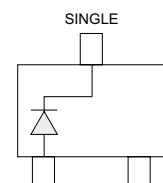
For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	BAS16	BAS19	BAS20	BAS21	UNITS
Reverse Voltage	$V_R$	75	100	150	200	V
Peak Reverse Voltage	$V_{RM}$	100	120	200	250	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and $f \geq 50$ Hz	$I_o$	250	200	200	200	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	2	2.5	2.5	2.5	A
Power Dissipation Derate Above 25°C	$P_{TOT}$	350	350	350	350	mW
Maximum Forward Voltage @ $I_F=10mA$ @ $I_F=100mA$	$V_F$	0.855 -	- 1.0	- 1.0	- 1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J= 25^\circ C$	$I_R$	1	0.1	0.1	0.1	$\mu A$
Typical Junction Capacitance( Notes1)	$C_J$	2	1.5	1.5	1.5	pF
Maximum Reverse Recovery (Notes2)	$T_{RR}$	6	50	50	50	ns
Maximum Thermal Resistance	$R_{\theta JA}$	357				$^\circ C / W$
Storage Temperature Range	$T_J$	-55 TO +125				$^\circ C$

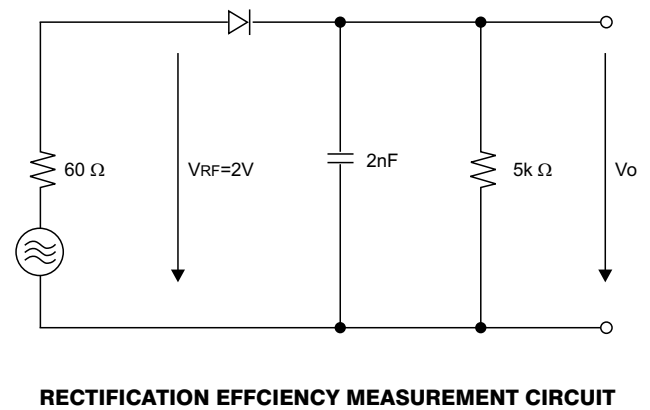
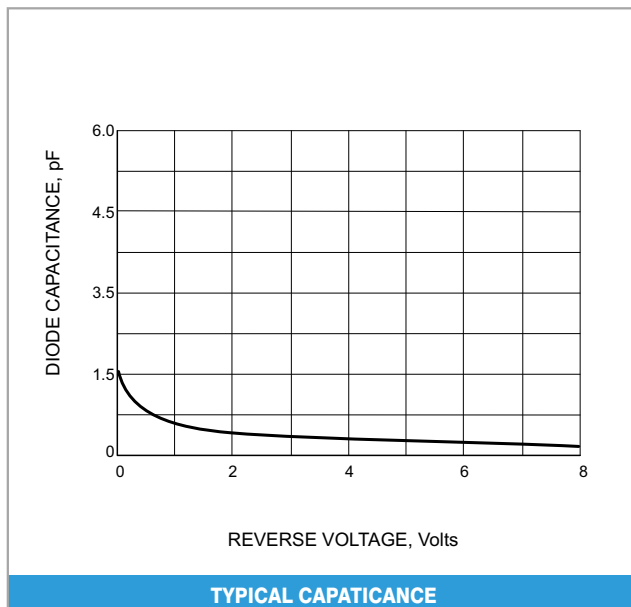
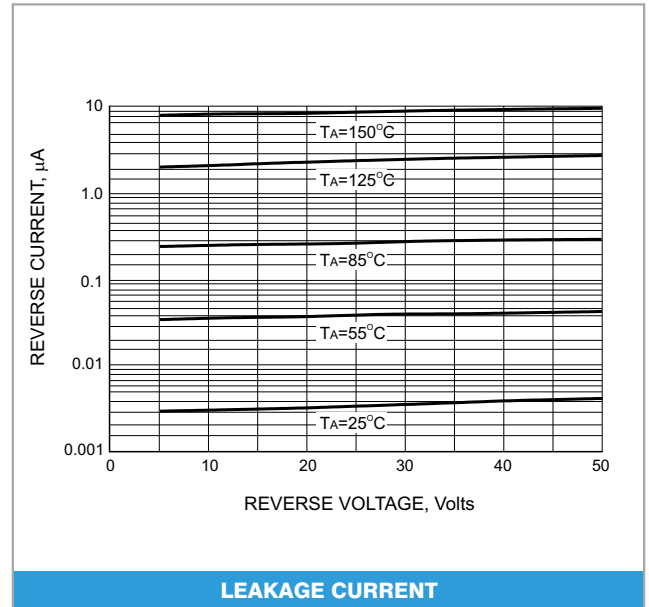
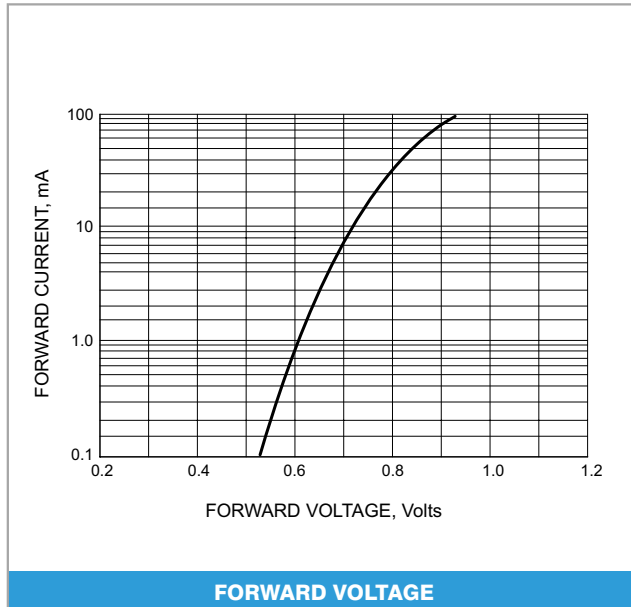
NOTE:

1.  $C_J$  at  $V_R=0$ ,  $f=1MHz$

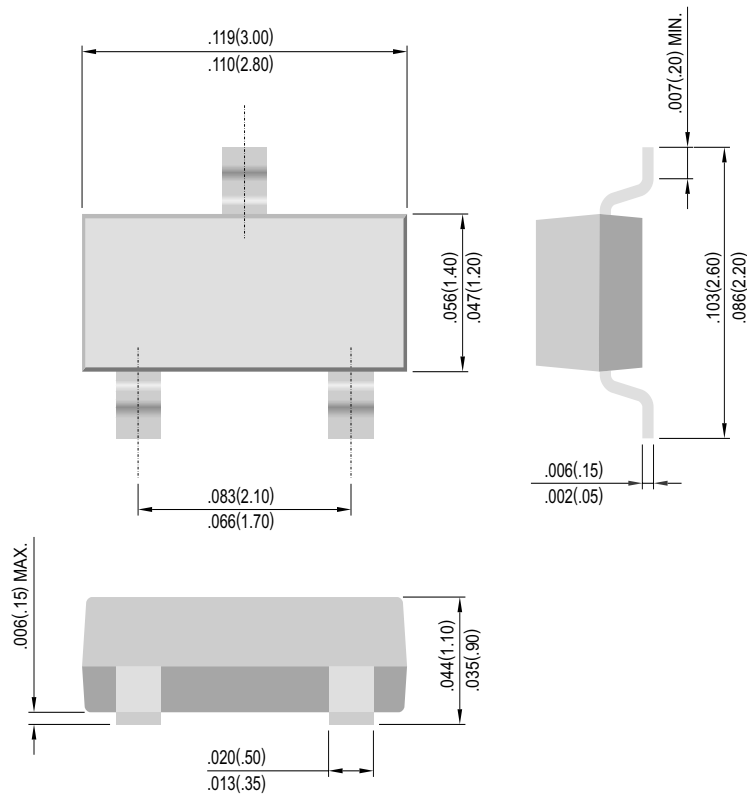
2. From  $I_F=10mA$  to  $I_R=1mA$ ,  $V_R=6Volts$ ,  $R_L=100\Omega$



BAS16, BAS19, BAS20, BAS21



SOT-23



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