



BAS16 ~ BAS21

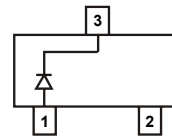
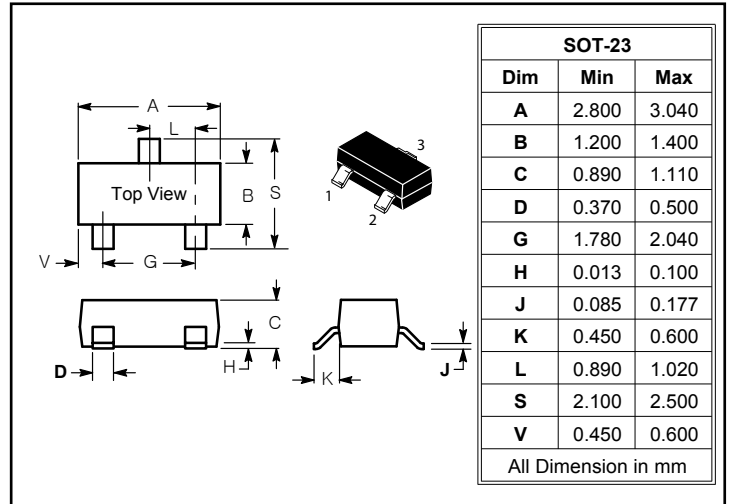
SURFACE MOUNT FAST SWITCHING DIODE

Features

- High Conductance
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Application
- Plastic Material – UL Recognition Flammability Classification 94V-O

Mechanical Data

- Case: SOT-23, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 0.008 grams (approx.)
- Mounting Position: Any



Maximum Ratings @_{T_A}=25°C unless otherwise specified

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 >=50 Hz	I _o	250	200	200	200	mA
Peak Forward Surge Current, t _p =1.0μs 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}	250	250	250	250	mW
Maximum Forward Voltage	V _F	0.855@10mA	1.0@100mA			V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J = 25°C	I _R	1	1	1	1	uA
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
Typical Thermal Resistance	RθJA	357				°C / W
Storage Temperature Range	T _J	-55 TO +125				°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=100Ω



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RATINGS AND CHARACTERISTIC CURVES

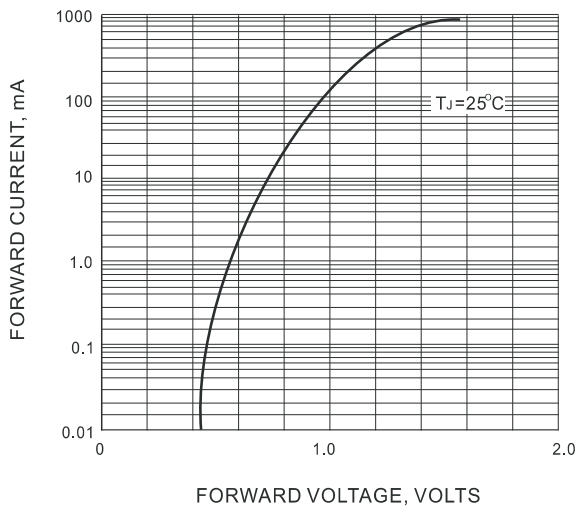


FIG 1-TYPICAL FORWARD CHARACTERISTIC

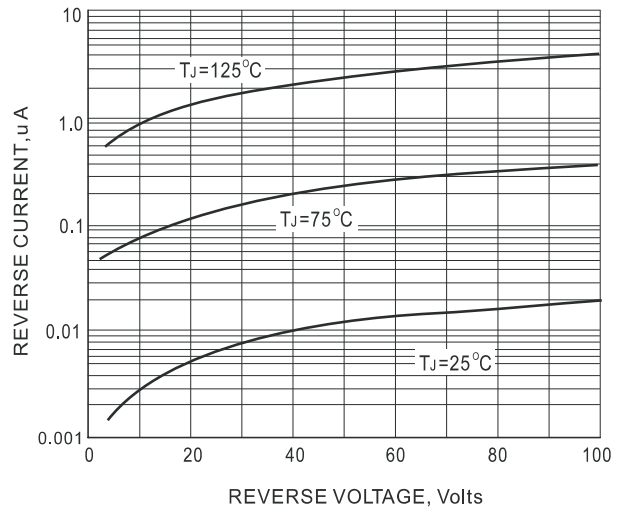


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

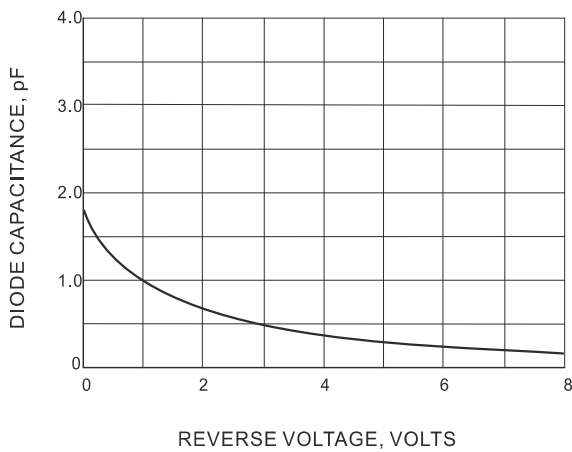


FIG. 3 TYPICAL JUNCTION CAPACITANCE

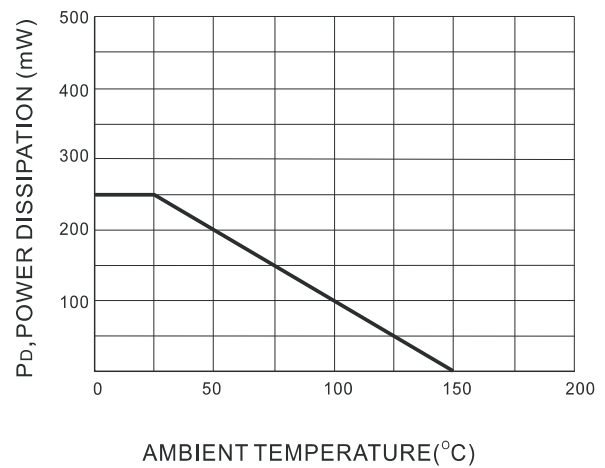


FIG. 4 POWER DERATING CURVE