

DATA SHEET

BAS70/A/C/S

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE	70 Volts	CURRENT	0.2 Amperes
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SOT-23	Unit: inch (mm)
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FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
Electrical identical standard JEDEC
- High conductor
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

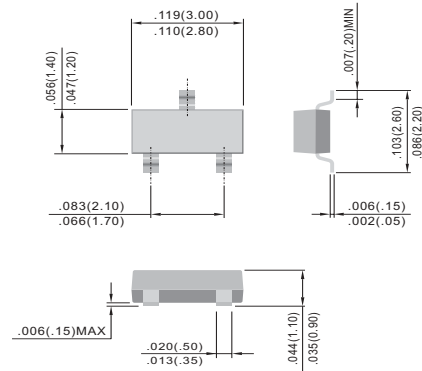
MECHANICAL DATA

Case: SOT-23, Plastic

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

Approx. Weight: 0.008 gram

Marking: A70,A72,A73,A74

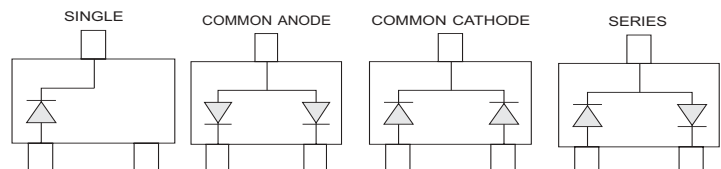


ABSOLUTE RATINGS

PARAMETER	Sym bol	BAS70	BAS70A	BAS70C	BAS70S	Units
Reverse Voltage	V_R	70				V
Peak Reverse Voltage	V_{RRM}	70				V
Average Rectified Current at $T_{em p}=25^{\circ}C$	I_o	0.2				A
Non-repetitive Peak Forward Surge Current at $t \leq 10$ s	I_{SM}	0.6				A

THERMAL CHARACTERISTICS

PARAMETER	Sym bol	BAS70	BAS70A	BAS70C	BAS70S	Units
Power Dissipation	P_{TOT}	225				mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556				$^{\circ}C/W$
Junction Temperature	T_J	150				$^{\circ}C$
Storage Temperature at $T_{em p}=25^{\circ}C$	T_{STG}	-55 to 150				$^{\circ}C$
Circuit Figure		SINGLE	COMMON ANODE	COMMON CATHODE	SERIES	



ELECTRICAL CHARACTERISTICS

PARAMETER	Sym bol	Test Condition	M IN .	TYP .	MAX .	Units
Reverse Breakdown Voltage	V_{BR}	$I_R=10 \mu A$	70	--	--	V
Reverse Current	I_R	$V_R=70 V$ $V_R=50 V$	--	--	1.0 0.1	μA
Forward Voltage	V_F	$I_F=1.0 mA$ $I_F=10 mA$ $I_F=15 mA$	--	--	0.41 0.75 1.00	V
Maximum Junction Capacitance	C_J	$V_R=0V, f=1.0 MHz$	--	--	2.0	pF

ELECTRICAL CHARACTERISTICS CURVE

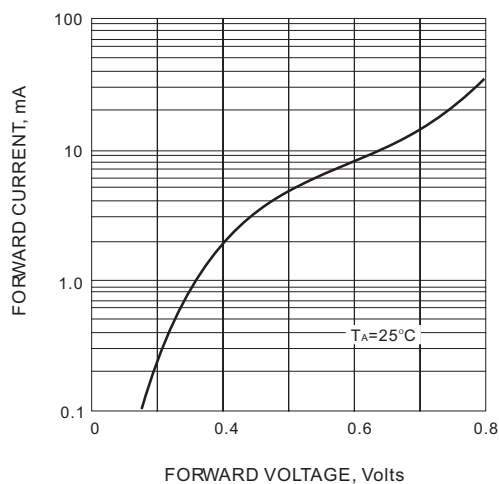


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

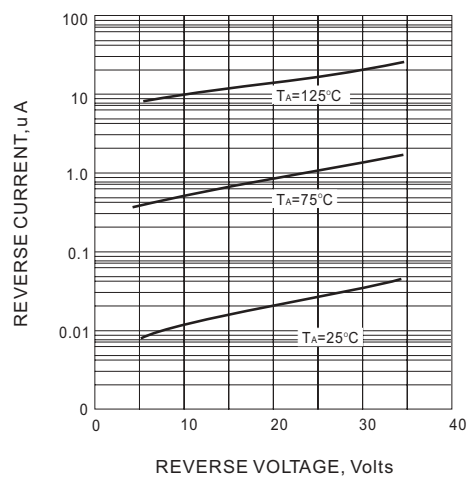


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

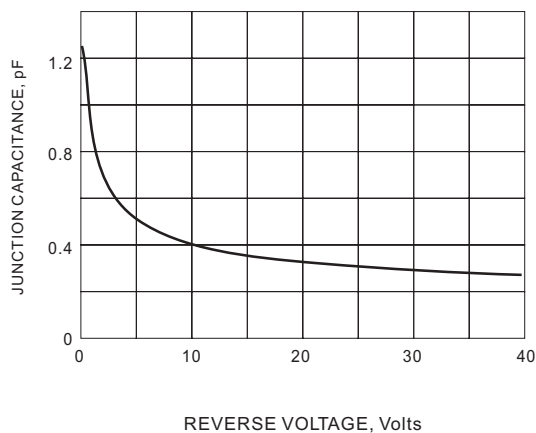


FIG. 3 TYPICAL JUNCTION CAPACITANCE

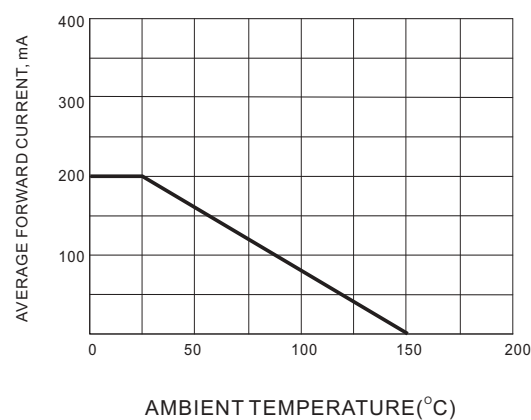


FIG. 4 FORWARD CURRENT DERATING