

BAS40W/AW/CW/SW

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 40 Volt **CURRENT** 0.2 Ampere

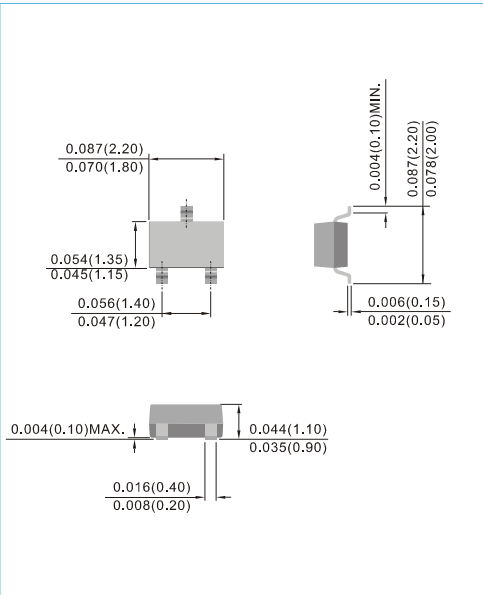
SOT-323 Unit : inch(mm)

FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
Electrical identical standard JEDEC
- High conductor
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: SOT-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0002 ounces, 0.005 grams

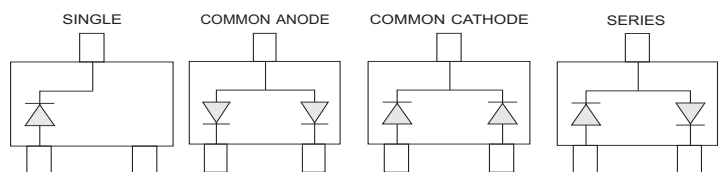


ABSOLUTE RATINGS

PARAMETER	SYMBOL	BAS40W	BAS40AW	BAS40CW	BAS40SW	UNITS
Marking Code		S40	S42	S43	S44	
Reverse Voltage	V_R	40				V
Peak Reverse Voltage	V_{RRM}	40				V
Average Rectified Current at Temp=25°C	$I_{F(AV)}$	0.2				A
Non-repetitive Peak Forward Surge Current at t=1.0 s	I_{FSM}	0.6				A

THERMAL CHARACTERISTICS

PARAMETER	Symbol	BAS40W	BAS40AW	BAS40CW	BAS40SW	Units
Power Dissipation	P_{TOT}	225				mW
Thermal Resistance , Junction to Ambient	$R_{\theta JA}$	556				°C/W
Storage and Operating Temperature Range	T_{STG}, T_J	-55 to 150				°C
Circuit Figure		SINGLE	COMMON ANODE	COMMON CATHODE	SERIES	



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ELECTRICAL CHARACTERISTICS

PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=10 \mu A$	40	--	--	V
Reverse Current	I_R	$V_R=25V$	--	--	1.0	μA
Forward Voltage	V_F	$I_F=1.0mA$ $I_F=10mA$ $I_F=40mA$	--	--	0.38 0.50 1.00	V
Total Capacitance	C_T	$V_R=0V, f=1.0MHz$	--	--	5.0	pF

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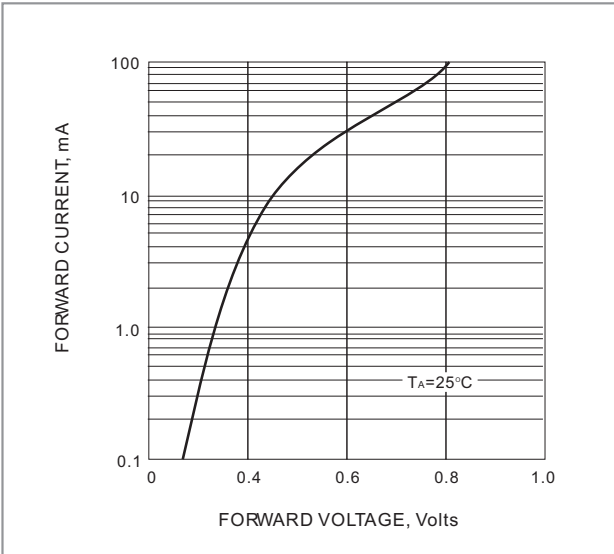


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

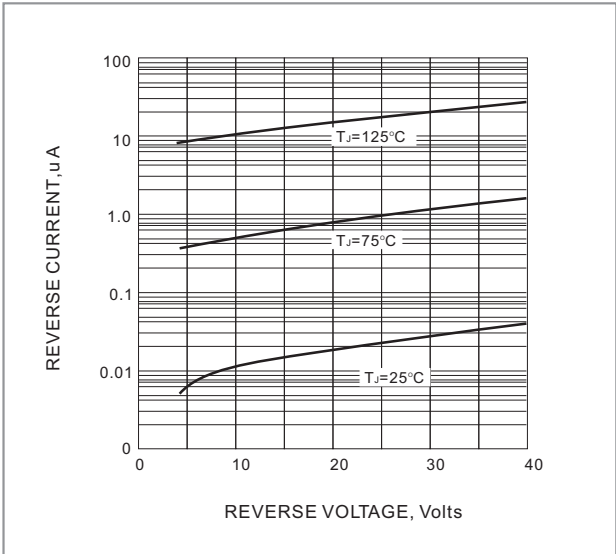


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

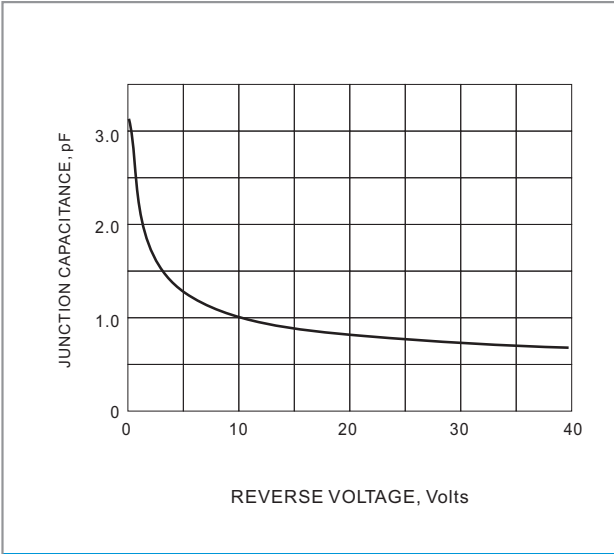


FIG. 3 TYPICAL JUNCTION CAPACITANCE

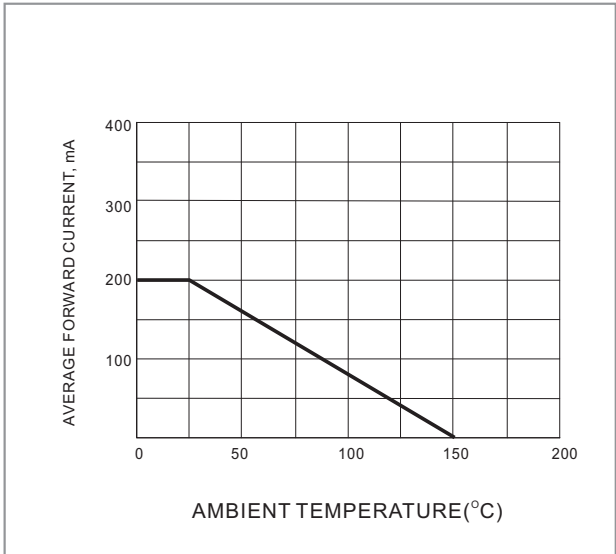


FIG. 4 FORWARD CURRENT DERATING

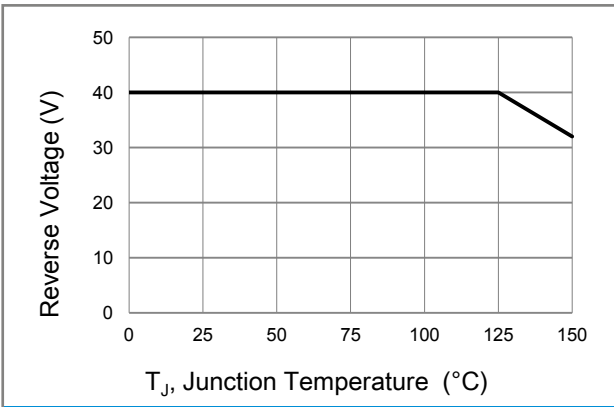
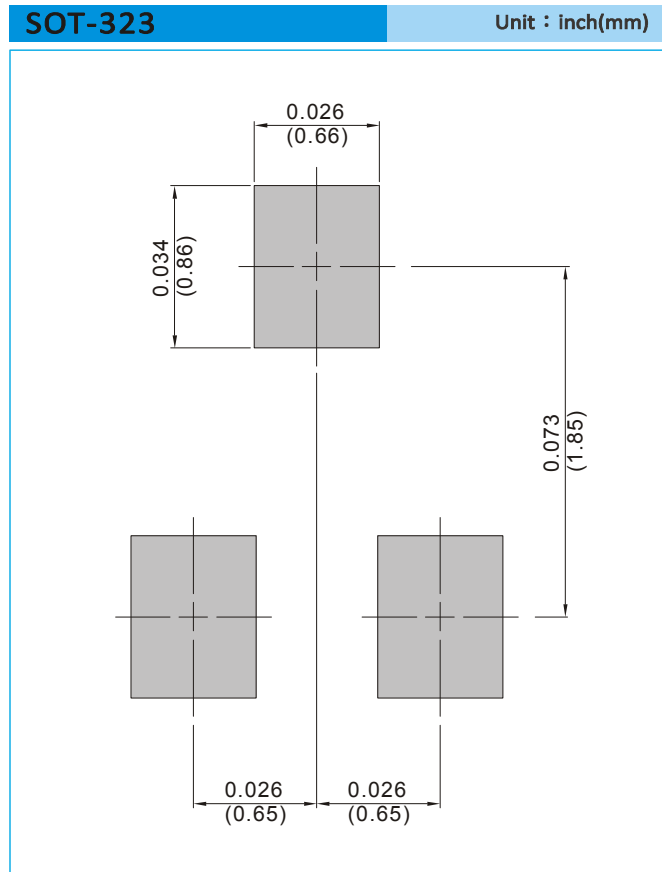


Fig.5 Operating Temperature Derating Curve

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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 12K per 13" plastic Reel
T/R - 3K per 7" plastic Reel

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