

BAS40 SERIES

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 40 Volt **CURRENT** 0.2 Ampere

FEATURES

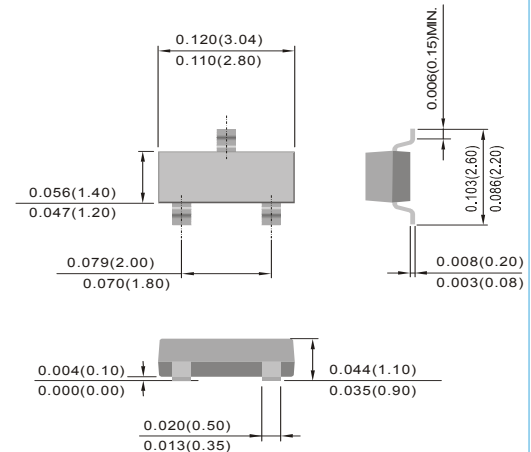
- Fast switching speed
- Surface mount package ideally suited for automatic insertion
Electrical identical standard JEDEC
- High conductor
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: SOT-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounces, 0.0084 grams

SOT-23

Unit : inch(mm)

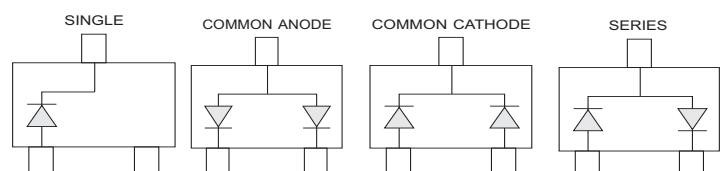


ABSOLUTE RATINGS

PARAMETER	Symbol	BAS40	BAS40A	BAS40C	BAS40S	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	BAS40	BAS40A	BAS40C	BAS40S	Units
Power Dissipation	P_{TOT}	225				mW
Thermal Resistance , Junction to Ambient	$R_{\theta JA}$	556				°C/W
Junction Temperature	T_J	-55 to 150				°C
Storage Temperature at Temp=25°C	T_{STG}	-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	$V_R = 25 V$	—	—	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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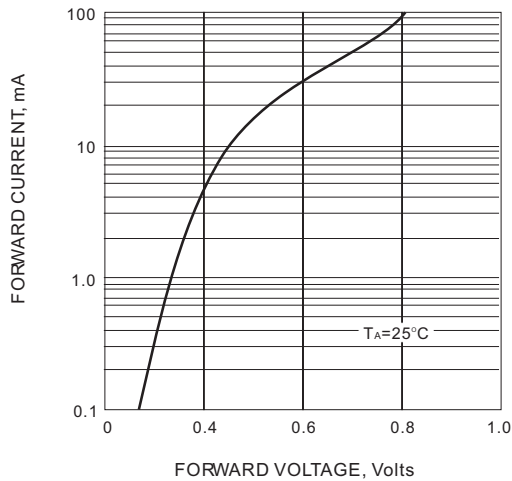


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

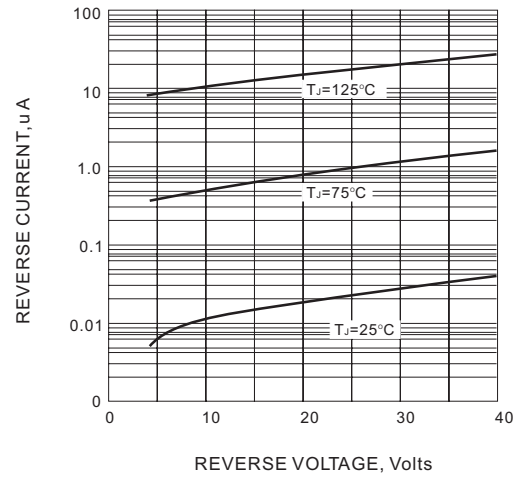


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

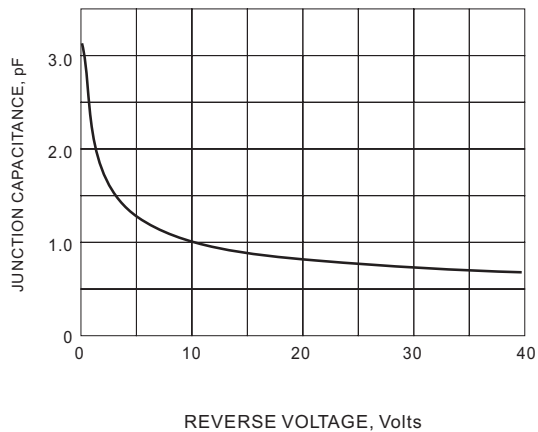


FIG. 3 TYPICAL JUNCTION CAPACITANCE

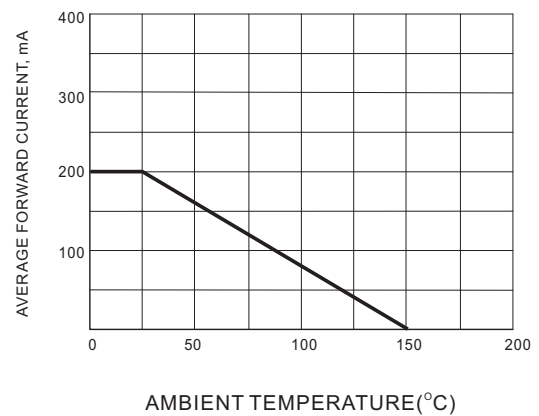


FIG. 4 FORWARD CURRENT DERATING

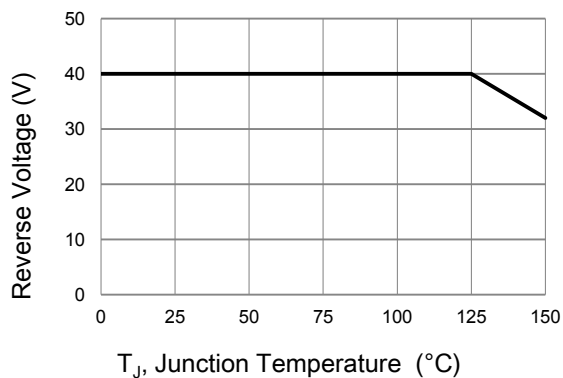


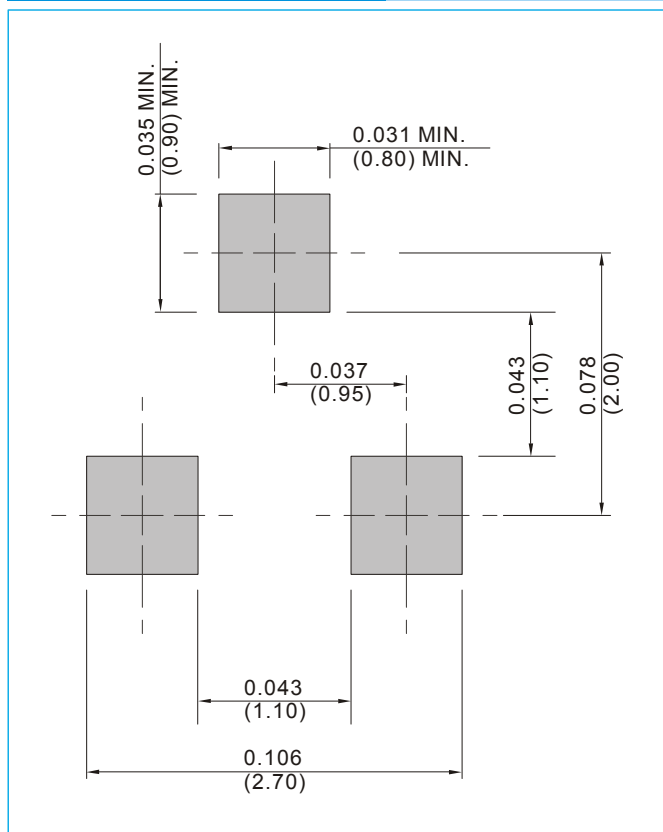
Fig.5 Operating Temperature Derating Curve

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MOUNTING PAD LAYOUT

SOT-23

Unit : inch(mm)



ORDER INFORMATION

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

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Part No._packing code_Version

BAS40_R1_00001

BAS40_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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