

BAS40W/AW/CW/SW

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 40 Volts

CURRENT 0.2 Ampers

SOT-323

Unit: inch (mm)

FEATURES

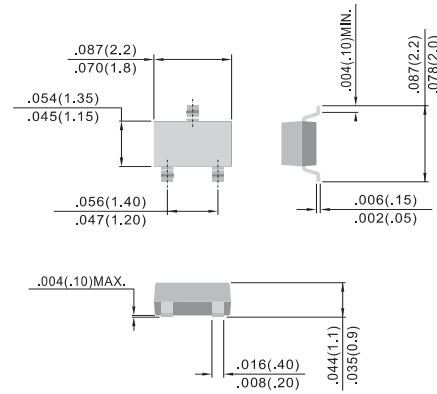
- Fast switching speed
- Surface mount package ideally suited for automatic insertion
Electrical identical standard JEDEC
- High conductor
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

Case: SOT-323, Plastic

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.005 gram

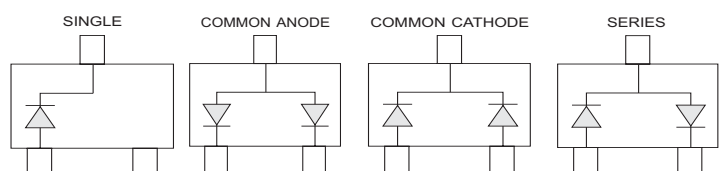


ABSOLUTE RATINGS

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
Junction Temperature	T_J	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	$V_{(BR)}$	$I_R=10\text{ }\mu\text{A}$	40	--	--	V
Reverse Current	I_R	$V_R=25\text{ V}$	--	--	1.0	μA
Forward Voltage	V_F	$I_F=1.0\text{mA}$ $I_F=10\text{mA}$ $I_F=40\text{mA}$	--	--	0.38 0.50 1.00	V
Total Capacitance	C_T	$V_R=0\text{V}$, $f=1.0\text{MHz}$	--	--	5.0	pF

ELECTRICAL CHARACTERISTICS CURVE

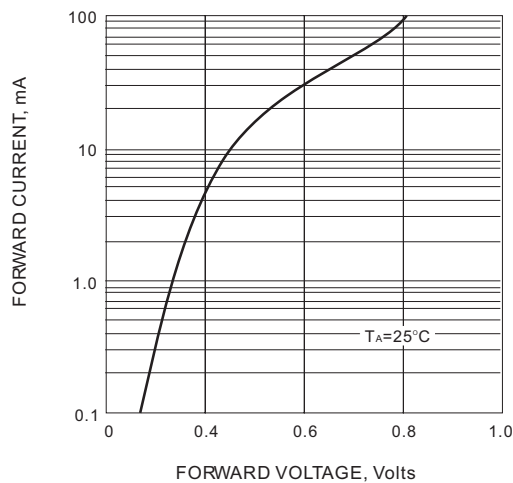


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

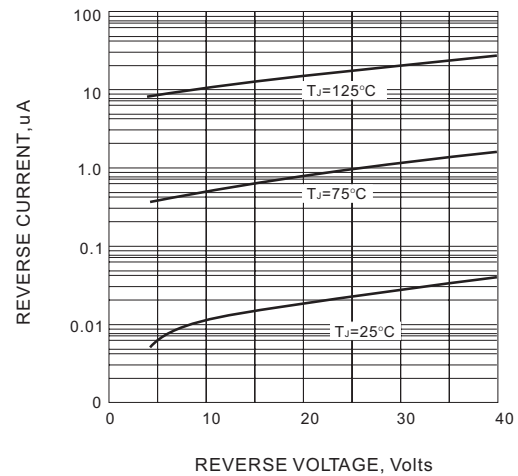


FIG. 2-TYPICAL REVERSE CHARACTERISTICS

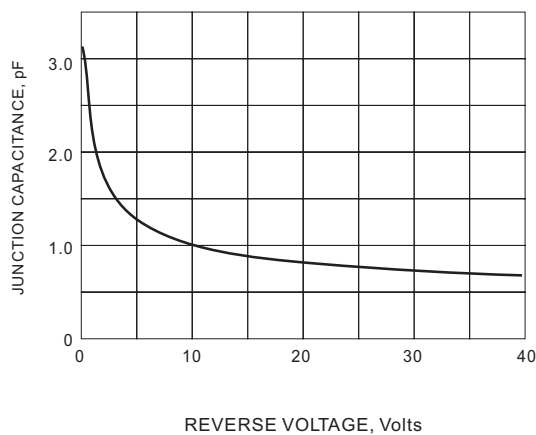


FIG. 3 TYPICAL JUNCTION CAPACITANCE

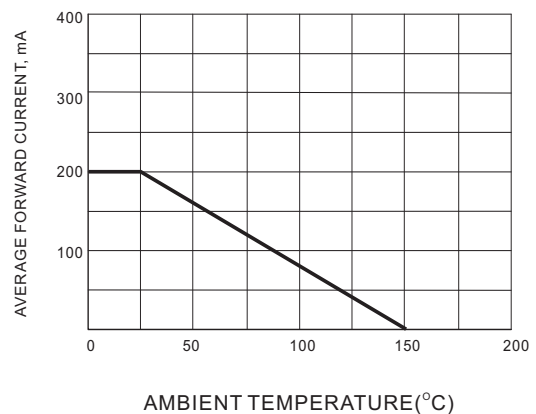


FIG. 4 FORWARD CURRENT DERATING

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MOUNTING PAD LAYOUT

SOT-323

Unit: inch (mm)

