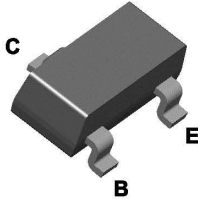




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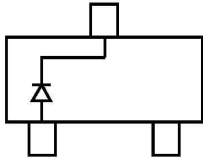
BAS40W-04-05-06



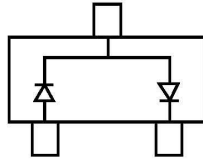
SOT-323

Mechanical Data

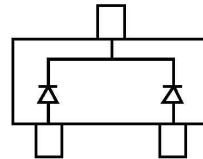
Case: SOT-323, Molded Plastic
 Terminals: Solderable per MIL-STD-202, Method 208
 Polarity: See Diagrams
 Marking: See Diagrams
 Weight: 0.006 grams (approx.)



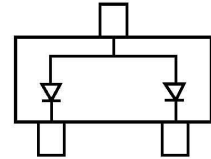
BAS40W Marking: 43, K43



BAS40W-04 Marking: 44, K44



BAS40W-05 Marking: 45, K45



BAS40W-06 Marking: 46, K46

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	BAS40W	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	40	V
RMS Reverse Voltage	V _{R(RMS)}	28	V
Forward Continuous Current (Note 1)	I _{FM}	200	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0s	I _{FSM}	600	mA
Power Dissipation (Note 1)	P _d	200	mW
Thermal Resistance Junction to Ambient Air (Note 1)	R _{θJA}	625	K/W
Operating Junction Temperature Range	T _j	-55 to +125	°C
Storage Temperature Range	T _{STG}	-65 to +150	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V _{(BR)R}	40	—	V	I _R = 10μA
Forward Voltage	V _{FM}	—	380 1000	mV mV	I _F = 1.0mA, t _p < 300μs I _F = 40mA, t _p < 300μs
Peak Reverse Current	I _{RM}	—	200	nA	V _R = 30V
Junction Capacitance	C _j	—	5.0	pF	V _R = 0, f = 1.0MHz
Reverse Recovery Time	t _{rr}	—	5.0	ns	I _F = I _R = 10mA, I _{rr} = 0.1 x I _R , R _L = 100Ω

- Notes: 1. Valid provided that terminals are kept at ambient temperature.
 2. Test period <3000μs.



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Typical Characteristics

B AS40W-04-05-06

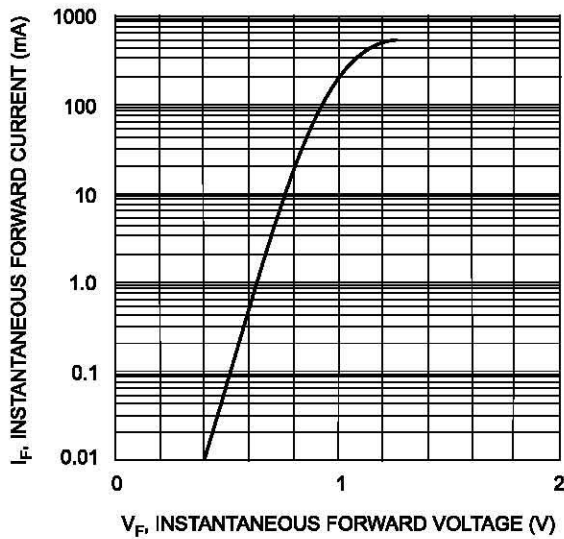


Fig. 1 Forward Characteristics

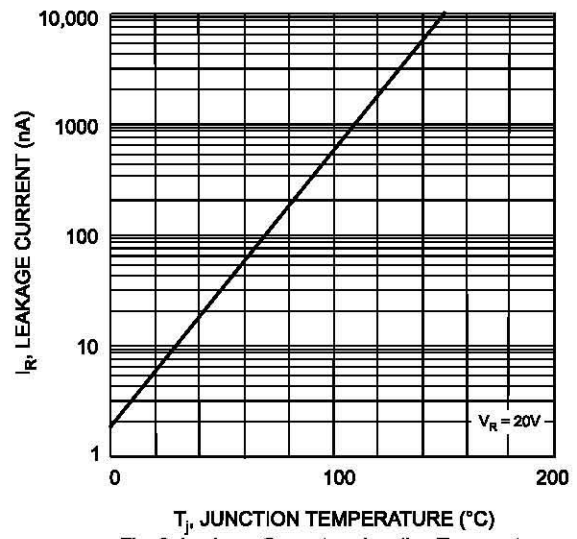


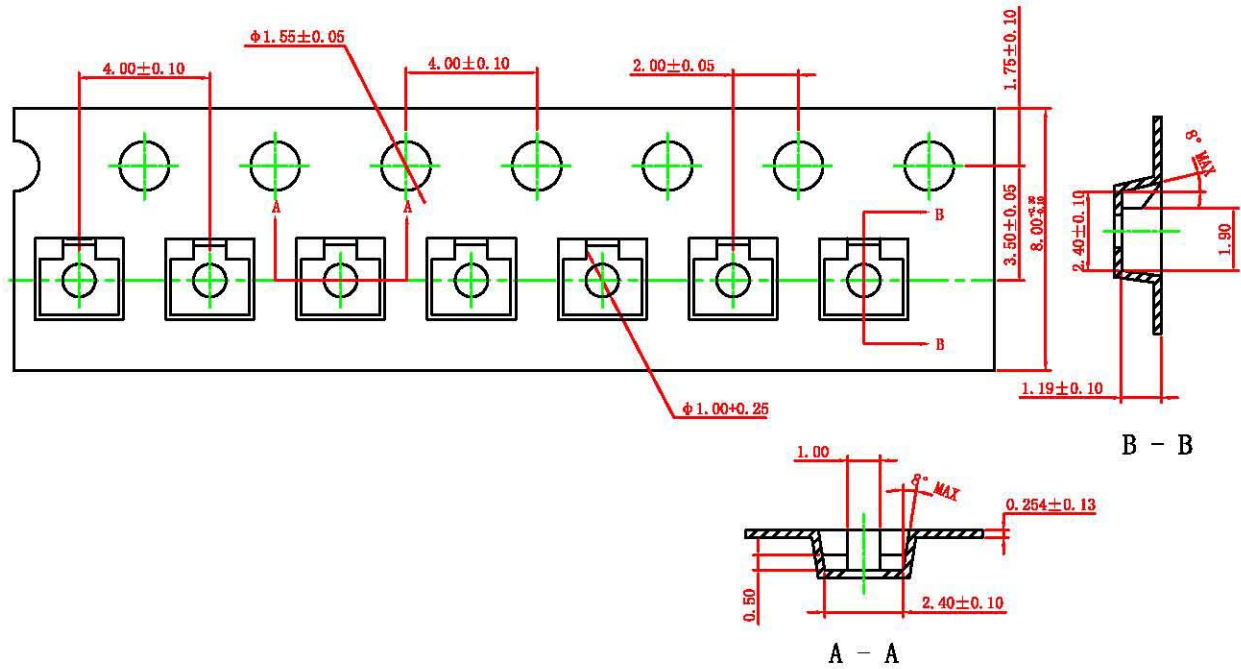
Fig. 2 Leakage Current vs Junction Temperature



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SOT-323

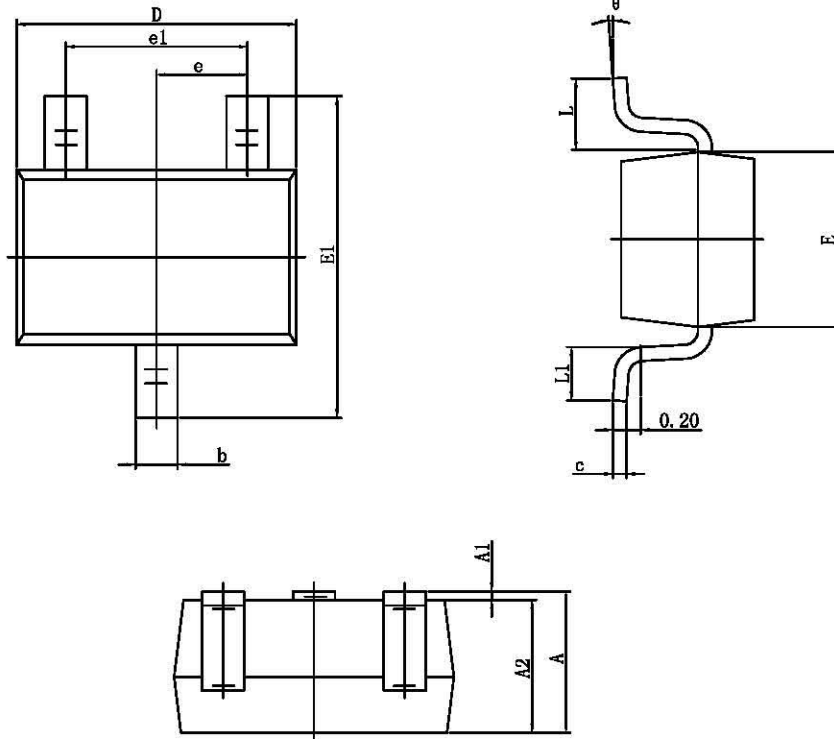




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SOT-323 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.200	0.400	0.008	0.016
c	0.080	0.100	0.003	0.004
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650TYP		0.026TYP	
e1	1.200	1.400	0.047	0.055
L	0.525REF		0.021REF	
L1	0.260	0.460	0.010	0.018
f	0°	8°	0°	8°