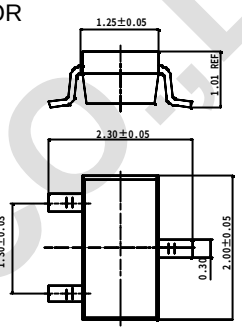
BAS40W SERIES SCHOTTKY DIODE

SOT-323

1.BASE
2.EMITTER
3.COLLECTOR



Unit : mm

FEATURES

Power dissipation

P_D : 200 mW (Tamb=25℃)

Collector current

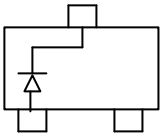
I_F: 200 mA

Collector-base voltage

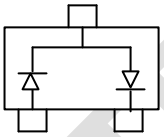
V_R: 40V

Operating and storage junction temperature range

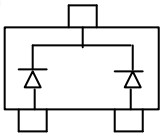
T_J, T_{stg}: -55℃ to +150℃



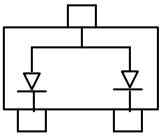
BAS40W Marking:43.K43



BAS40W-04 Marking:44.K44



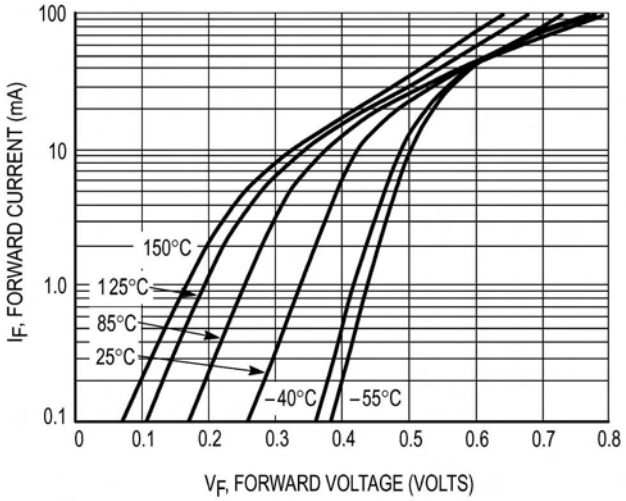
BAS40W-05 Marking:45.K45

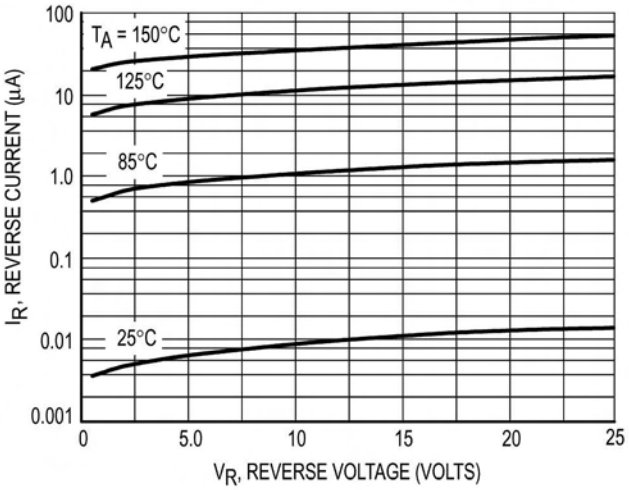


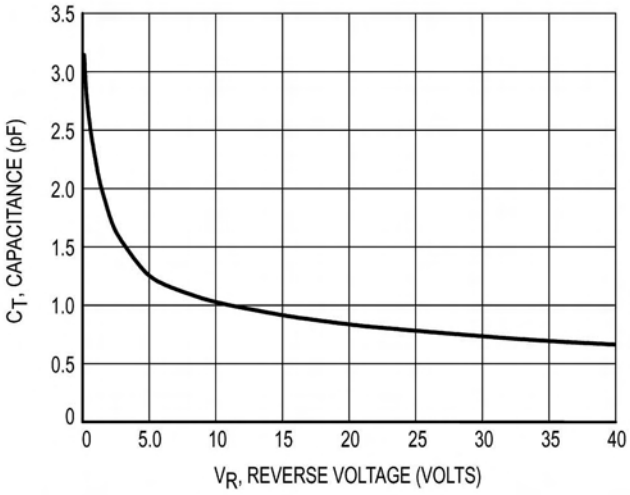
BAS40W-06 Marking:46.K46

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

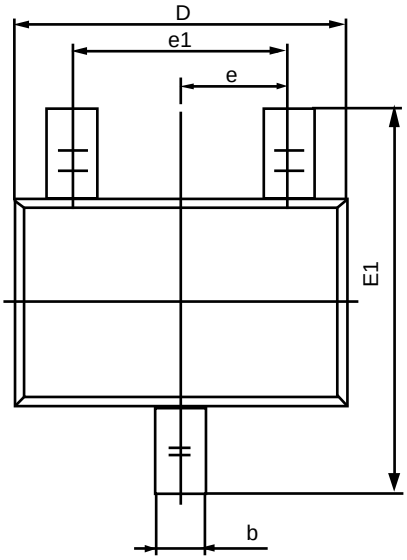
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	I_R= 10μA	40		V
Reverse voltage leakage current	I_R	V_R=30V		200	nA
Forward voltage	V_F	I_F=1mA I_F=40mA		380 1000	mV
Diode capacitance	C_D	V_R=0V f=1MHz		5	pF
Reveres recovery time	t_{rr}	I_F=10mA through I_R=10mA to IR=1mA		5	nS

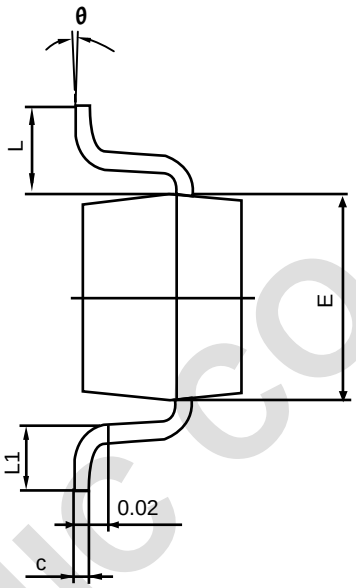

100
10
1.0
0.1
IF, FORWARD CURRENT (mA)
150°C
125°C
85°C
25°C
−40°C
−55°C
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
VF, FORWARD VOLTAGE (VOLTS)

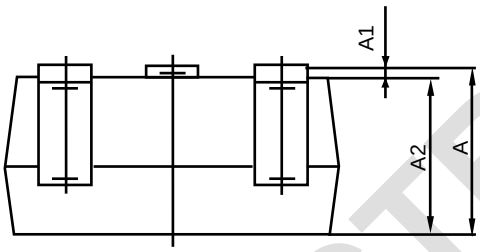

100
10
1.0
0.1
0.01
0.001
IR, REVERSE CURRENT (µA)
TA = 150°C
125°C
85°C
25°C
0
5.0
10
15
20
25
VR, REVERSE VOLTAGE (VOLTS)


3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
CT, CAPACITANCE (pF)
0
5.0
10
15
20
25
30
35
40
VR, REVERSE VOLTAGE (VOLTS)

SOT-323 PACKAGE OUTLINE DIMENSIONS







Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
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
θ	0°	8°	0°	8°