



BAS40xxT SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

- Low forward voltage
- Fast switching

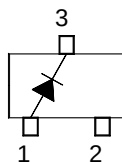
Marking:

BAS40T Marking Code: **43**

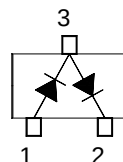
BAS40-04T Marking Code: **44**

BAS40-05T Marking Code: **45**

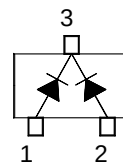
BAS40-06T Marking Code: **46**



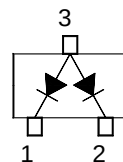
BAS40T



BAS40-04T



BAS40-05T



BAS40-06T

SOT-523

Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

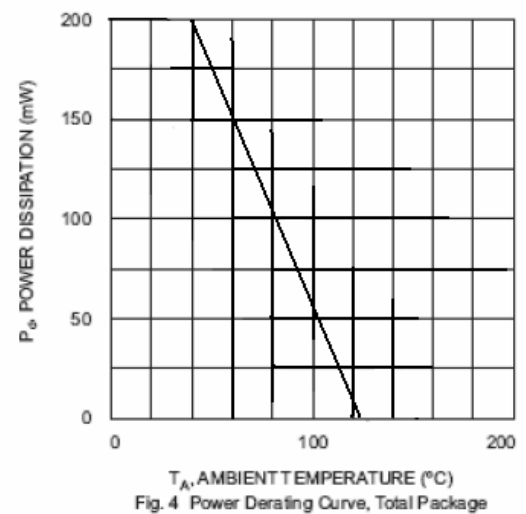
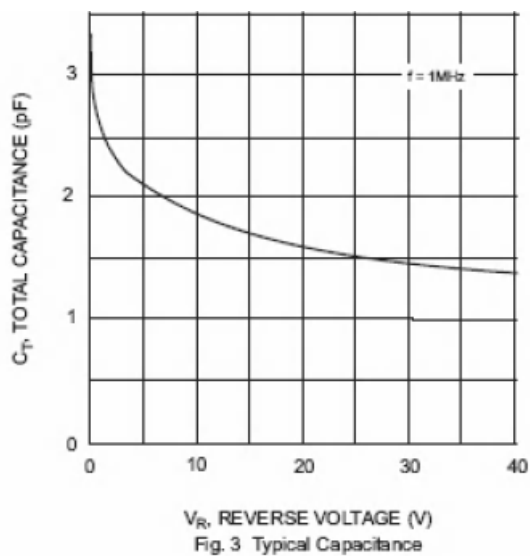
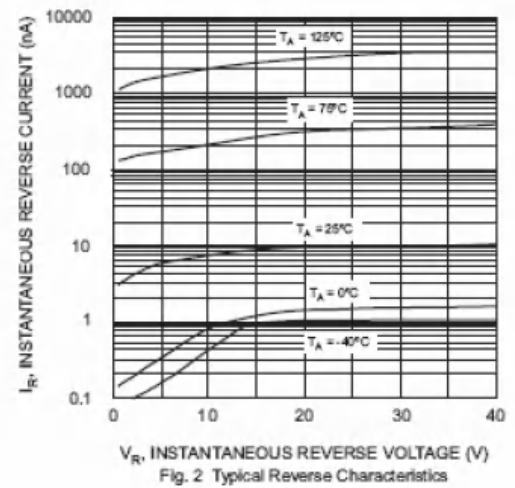
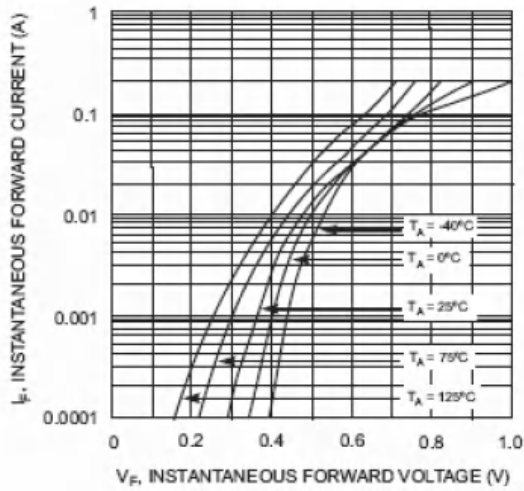
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
DC Blocking Voltage	V_R	40	V
Forward Continuous Current	I_F	200	mA
Peak Forward Surge Current (at $t_p < 1\text{ s}$)	I_{FSM}	600	mA
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_S	- 55 to + 150	$^{\circ}\text{C}$

Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 40\text{ mA}$	V_F V_F	- -	380 1000	mV mV
Reverse Current at $V_R = 30\text{ V}$	I_R	-	200	nA
Reverse Breakdown Voltage at $I_R = 10\text{ }\mu\text{A}$	$V_{(BR)R}$	40	-	V
Reverse Recovery Time from $I_F = 10\text{ mA}$ through $I_R = 10\text{ mA}$ to $I_R = 1\text{ mA}$	t_{rr}	-	5	ns
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	5	pF

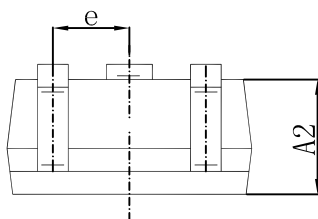
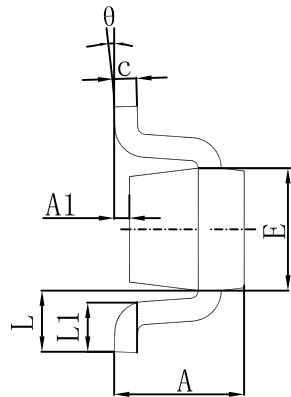
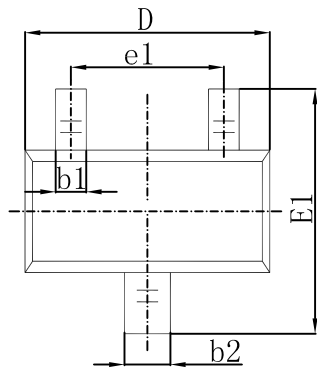


Typical Characteristics



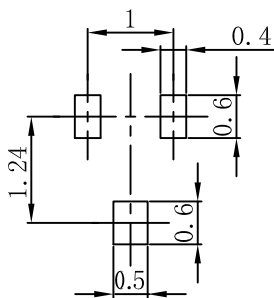


SOT-523 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500 TYP.		0.020 TYP.	
e1	0.900	1.100	0.035	0.043
L	0.400 REF.		0.016 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-523 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.