

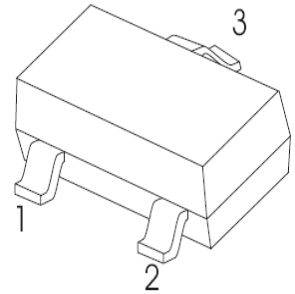
SOT-23 Plastic-Encapsulate Schottky Barrier Diodes

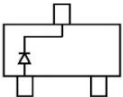
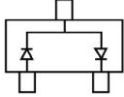
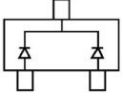
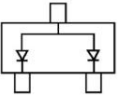
Features

- High Current Capability
- Low Forward Voltage Drop
- Extremely Fast Switching Speed

Marking

SOT-23



BAS40	BAS40-04	BAS40-05	BAS40-06
			
MARKING:43•	MARKING:44	MARKING:45	MARKING:46

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

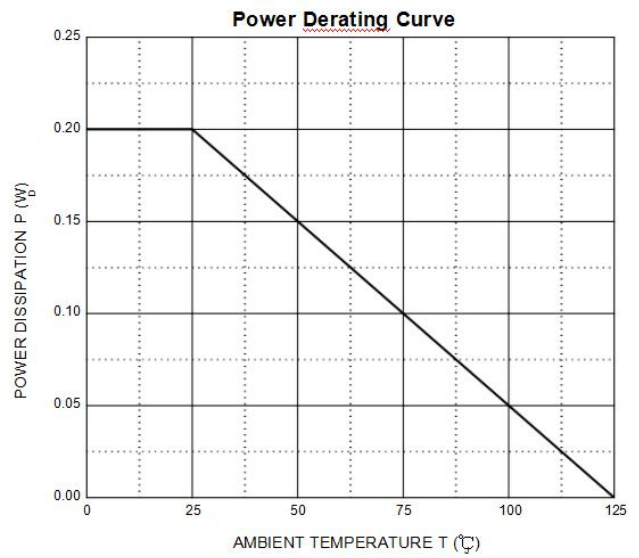
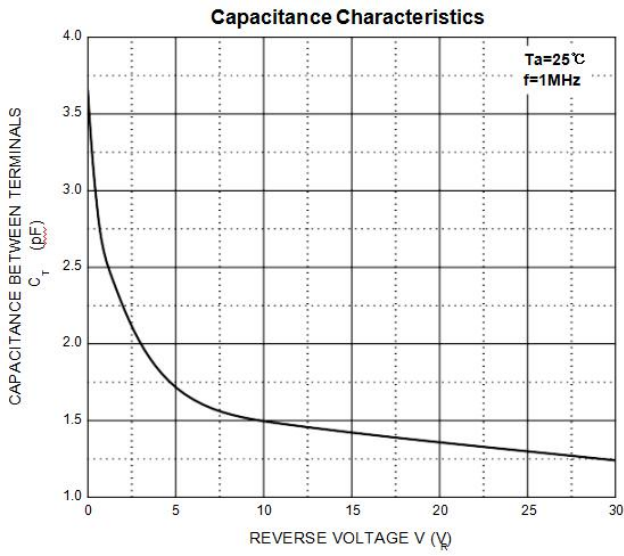
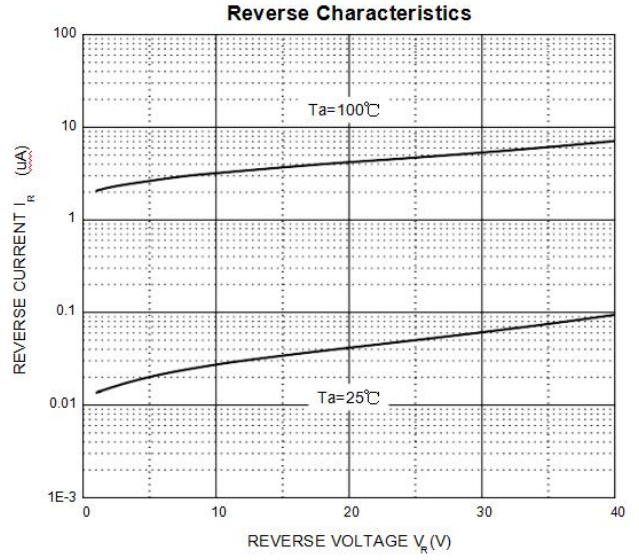
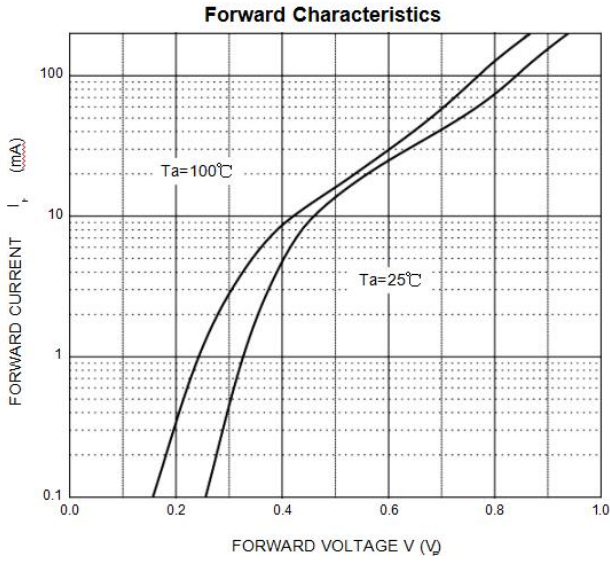
Parameter	Symbol	Limit	Unit
Reverse Voltage	V_R	40	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum average Forward rectified Current	I_{FM}	200	mA
Peak forward surge current 8.3ms single half sine-wave	I_{FSM}	600	mA
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	°C/W
Junction Temperature	T_j	125	°C
Storage Temperature	T_{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=10\mu A$	40			V
Reverse Leakage Current	I_R	$V_R=30V$			200	nA
Forward voltage	V_F	$I_F=1.0mA$ $I_F=40mA$			0.38 1.0	V
Capactiance	C_T	$V_R=0V, f=1MHz$			5	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10mA$ $I_{rr}=0.1X I_R, R_L=100\Omega$			5	ns

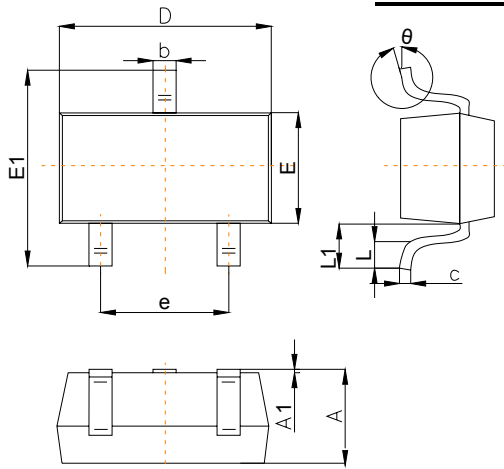
The above data are for reference only.

Typical Characteristics



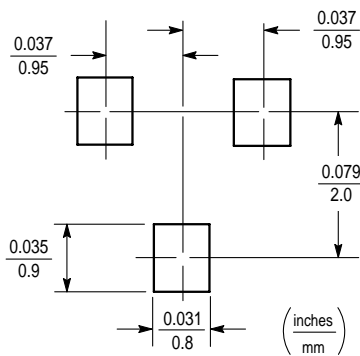
Outlitne Drawing

SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		
	Min	Typ	Max
A	0.90		1.40
A1	0.00		0.10
b	0.30		0.50
c	0.08		0.20
D	2.80	2.90	3.10
E	1.20		1.60
E1	2.25		2.80
e	1.80	1.90	2.00
L	0.10		0.50
L1	0.4		0.55
θ	0°		10°

Suggested Pad Layout



Note:

1. Controlling dimension: in/millimeters.
2. General tolerance: ±0.05mm.
3. The pad layout is for reference purposes only.

PACKAGE SPECIFICATIONS

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (pcs)	Box Size (mm)	QTY/Box (pcs)	Carton Size (mm)	Q'TY/Carton (pcs)
SOT-23	7'	330	3000	203×203×195	45000	438×438×220	180000