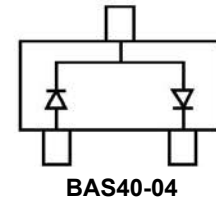
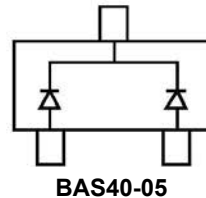
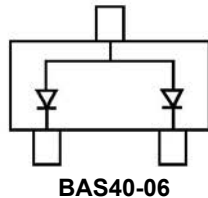
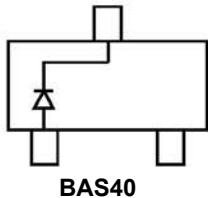
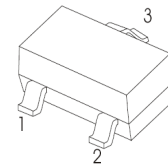


**BAS40/-04/-05/-06 Schottky Barrier Diode**
**Features**

- ◆ Low Forward Voltage
- ◆ Fast Switching

SOT-23


**Marking Information**

BAS40	BAS40-06	BAS40-05	BAS40-04

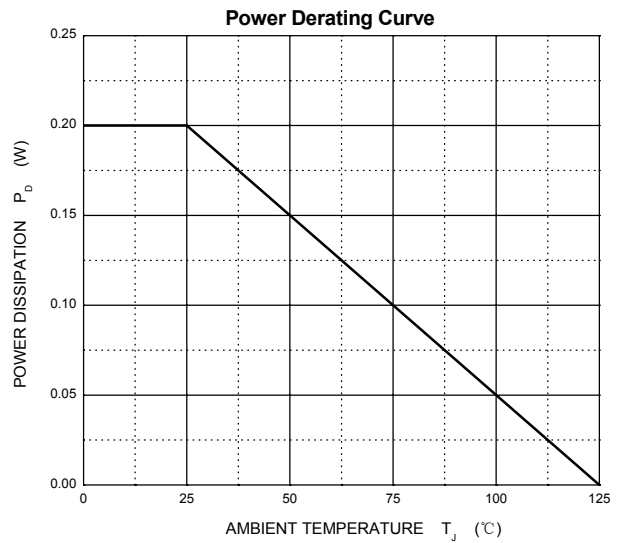
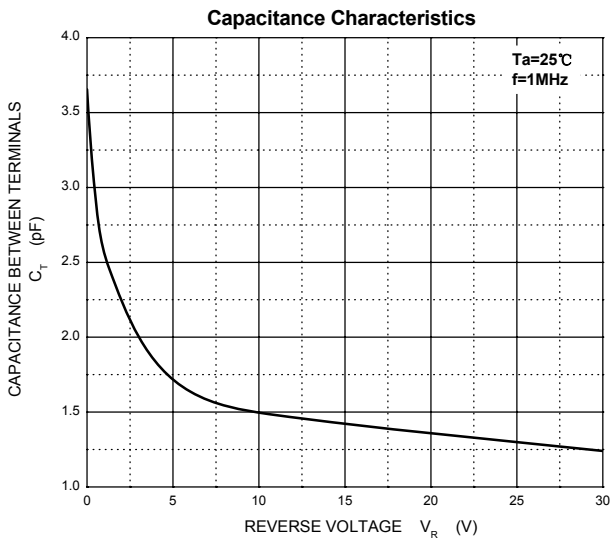
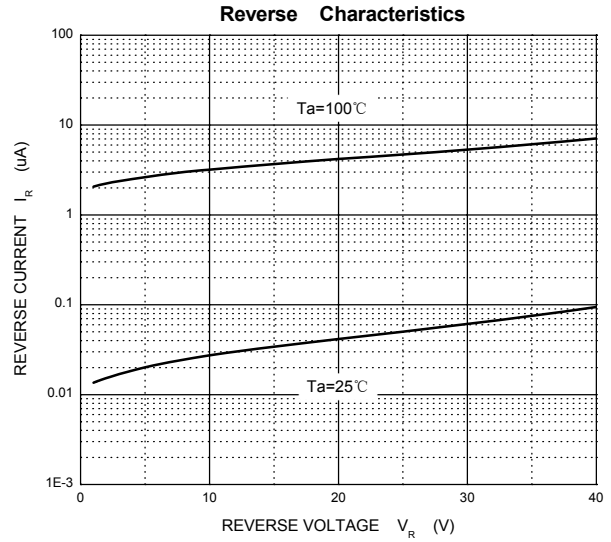
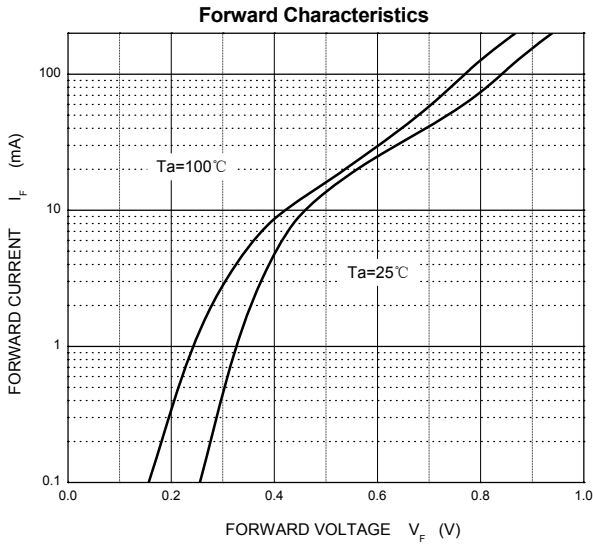
**Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$  unless otherwise specified)**

Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
Forward Continuous Current	$I_{FM}$	200	mA
Average Rectified Output Current	$I_O$	200	mA
Non-Repetitive Peak Forward Surge Current @ $t = 8.3\text{ms}$	$I_{FSM}$	0.6	A
Power Dissipation	$P_D$	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	$T_J$	-40 ~ +125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 ~ +150	$^\circ\text{C}$

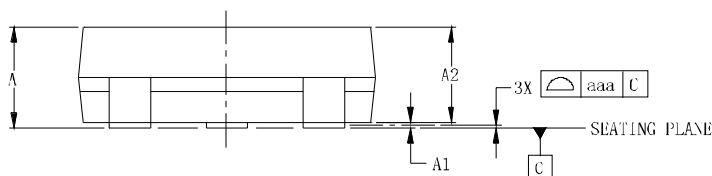
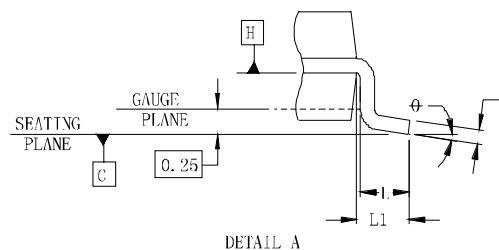
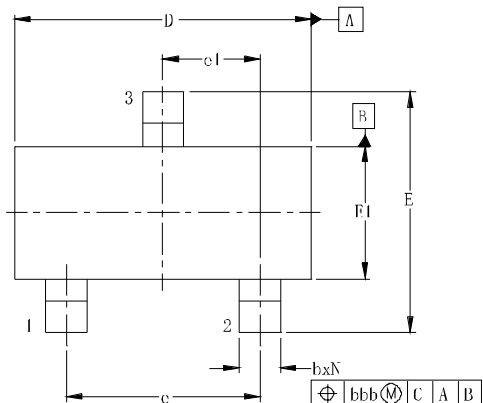
**Electrical Characteristics ( $T_A=25^\circ\text{C}$  unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=10\mu\text{A}$	40		V
Reverse voltage leakage current	$I_R$	$V_R=30\text{V}$		200	nA
Forward voltage	$V_F$	$I_F=1\text{mA}$ $I_F=40\text{mA}$		380 1000	mV
Diode capacitance	$C_D$	$V_R=0, f=1\text{MHz}$		5	pF
Reverse recovery time	$t_{rr}$	$I_{rr}=1\text{mA}, I_R=I_F=10\text{mA}$ $R_L=100\Omega$		5	ns

**Typical Performance Characteristics (TA=25°C unless otherwise Specified)**

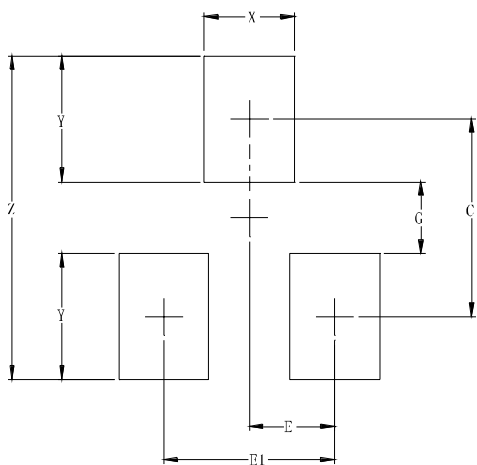


### SOT-23 Package Outline Drawing



DIMENSIONS						
SYM	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.035	-	0.044	0.89	-	1.12
A1	0.000	-	0.004	0.01	-	0.10
A2	0.035	0.037	0.040	0.88	0.95	1.02
b	0.012	-	0.020	0.30	-	0.51
c	0.003	-	0.007	0.08	-	0.18
D	0.110	0.114	0.120	2.80	2.90	3.04
E	0.082	0.093	0.104	2.10	2.37	2.64
E1	0.047	0.051	0.055	1.20	1.30	1.40
e	0.075			1.90BSC		
e1	0.037			0.95BSC		
L	0.015	0.020	0.024	0.40	0.50	0.60
L1	0.022			0.55		
N	3			3		
ϕ	0°	-	8°	0°	-	8°
aaa	0.004			0.10		
bbb	0.008			0.20		

### Suggested Land Pattern



DIMENSIONS		
SYM	INCHES	MILLIMETERS
C	0.087	2.20
E	0.037	0.95
E1	0.075	1.90
G	0.031	0.80
X	0.039	1.00
Y	0.055	1.40
Z	0.141	3.60

### Contact Information

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