

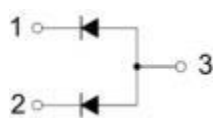
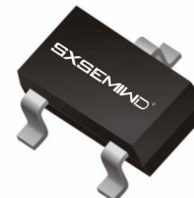
FEATURES

For low-loss, fast-recovery, meter protection,
bias isolation and clamping applications

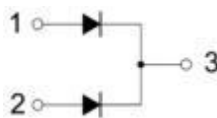
Integrated diffused guard ring

Low forward voltage

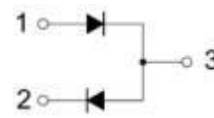
SOT-23



BAT64-06
MARKING: 66S



BAT64-05
MARKING: 65S



BAT64-04
MARKING: 64S

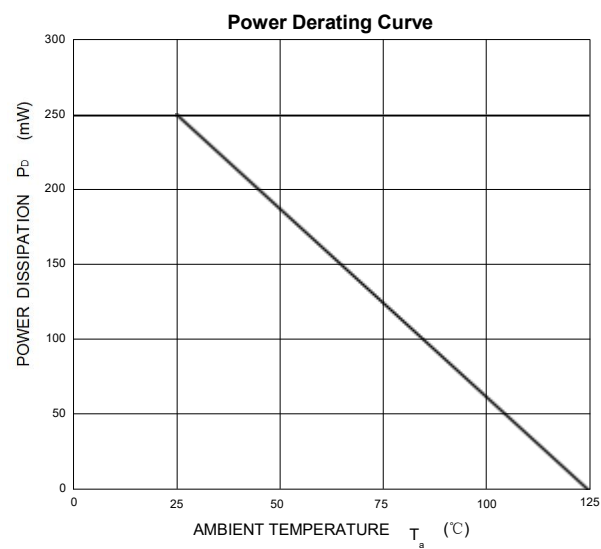
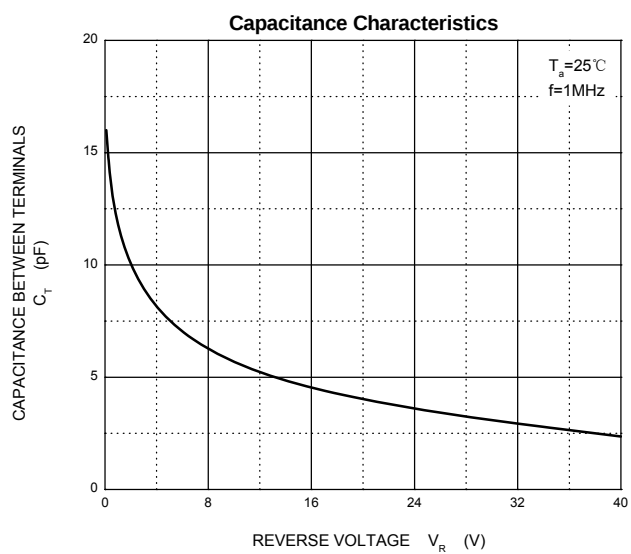
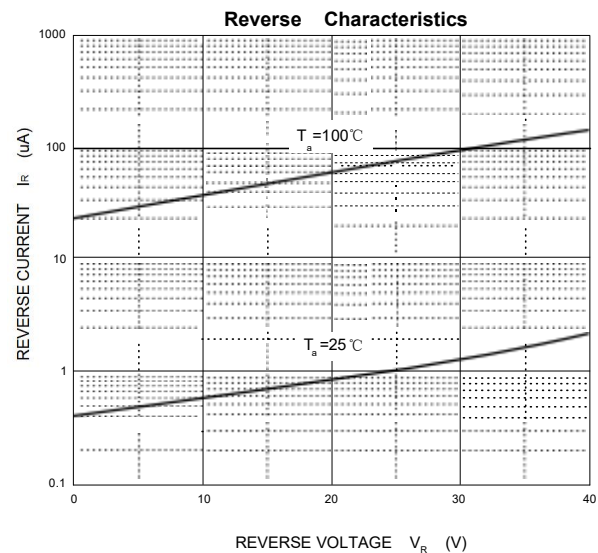
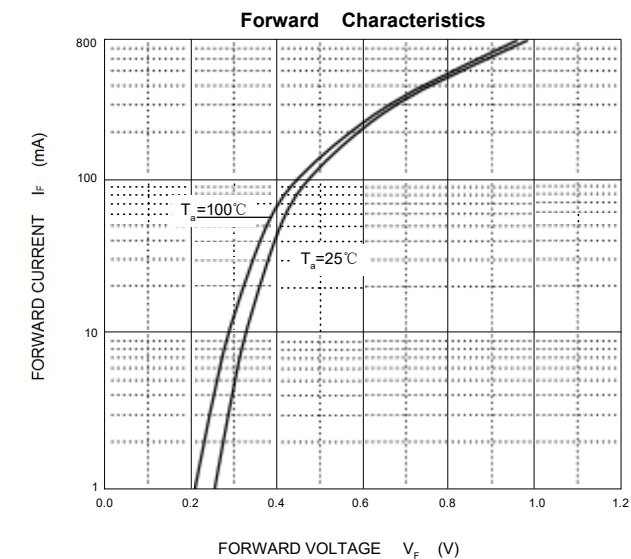
Maximum Ratings @T_a=25°C

Parameter	Symbol	Limits	Unit
Peak reverse voltage DC reverse	V_{RM} V_R	40	V
Non-repetitive Peak forward surge current @t=8.3ms	I_{FSM}	0.8	A
Forward current	I_F	0.25	A
Power Dissipation	P_D	250	mW
Thermal Resistance Junction-to-Ambient	$R_{\theta JA}$	400	°C/W
Operating Junction Temperature Range	T_J	-40 ~ +125	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

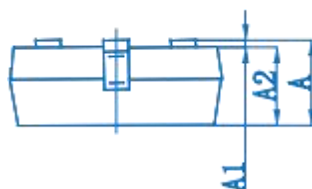
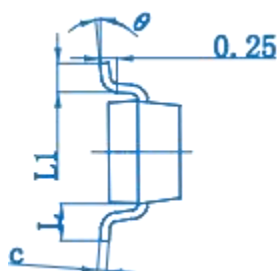
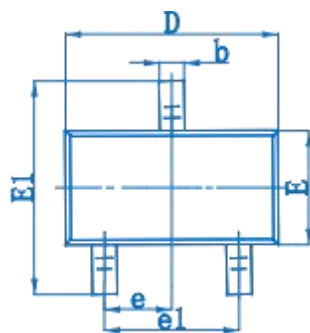
Electrical Ratings @T_a=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse breakdown voltage	V_R	40			V	$I_R=10\mu A$
Forward voltage	V_F			350 430 520 750	mV	$I_F=1mA$ $I_F=10mA$ $I_F=30mA$ $I_F=100mA$
Reverse current	I_R			2	μA	$V_R=25V$
Capacitance between terminals	C_T		6		pF	$V_R=1V, f=1MHz$

Typical Characteristics

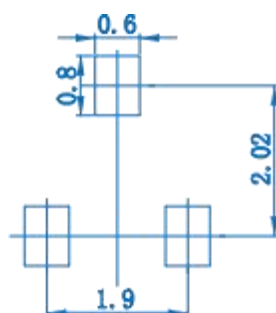


SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 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.