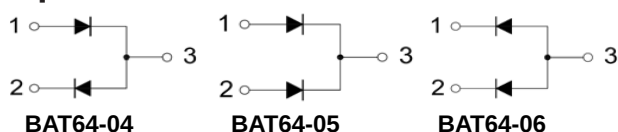


SOT-23 Plastic-Encapsulate Diodes**BAT64-04/-05/-06****SCHOTTKY BARRIER DIODE****FEATURES**

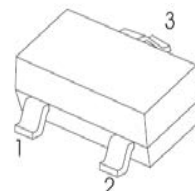
- Low Forward Voltage
- Integrated Diffused Guard Ring

MARKING

BAT64-04	BAT64-05	BAT64-06

Equivalent Circuit

SOT - 23

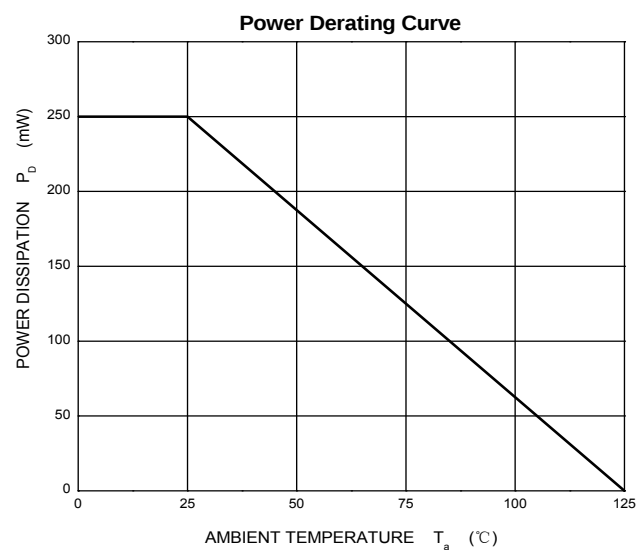
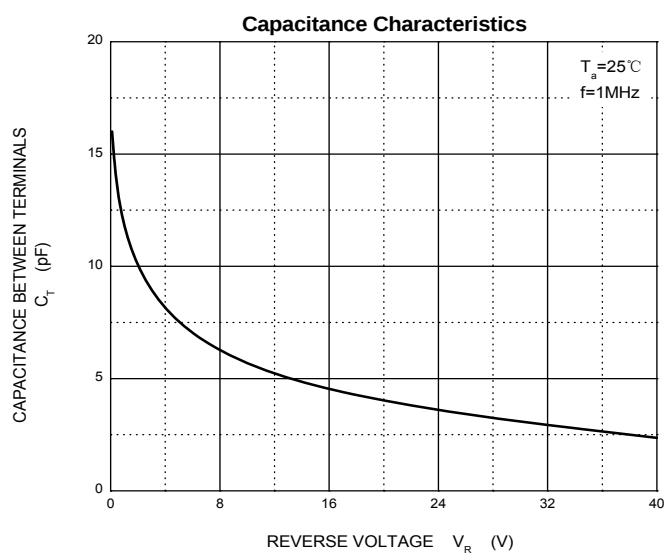
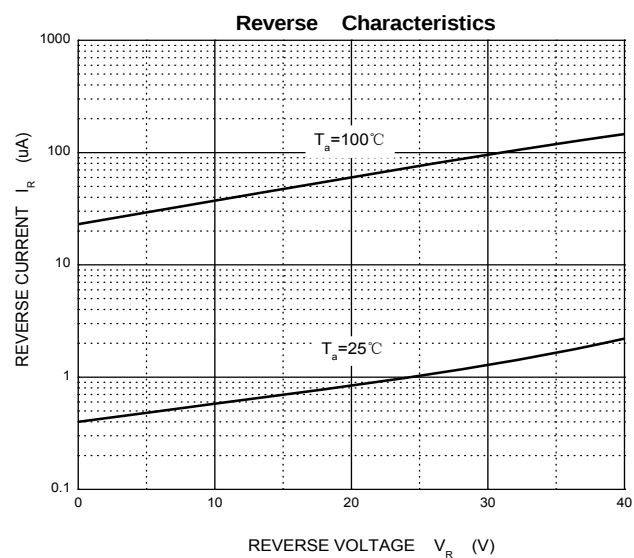
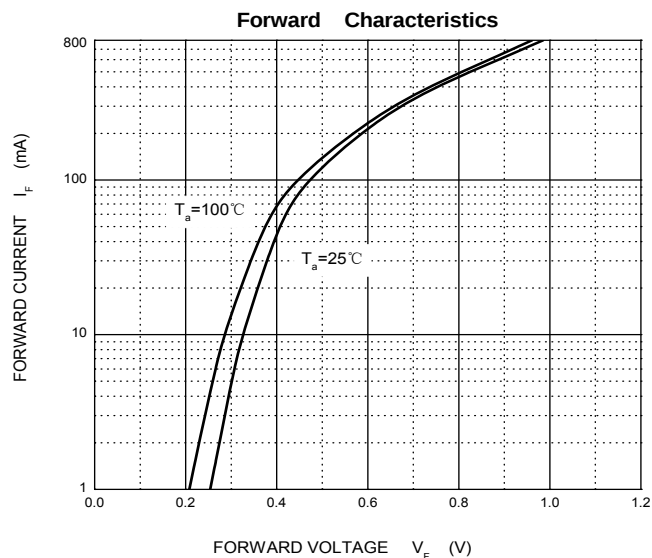
**MAXIMUM RATINGS** ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	40	V
DC reverse	V_R		
Non-repetitive Peak forward surge current @ $t=8.3\text{ms}$	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	$^{\circ}\text{C}/\text{W}$
Operating Junction Temperature Range	T_j	$-40 \sim +125$	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	$-55 \sim +150$	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

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

Typical Characteristics

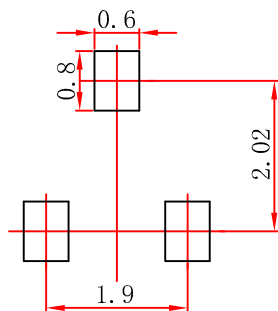


Package Outline Dimensions (SOT-23)



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°

Suggested Pad Layout (SOT-23)



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