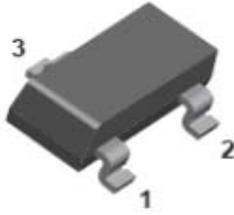
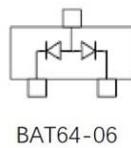
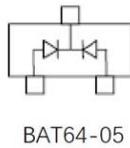
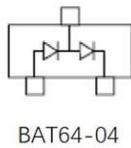
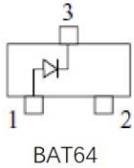


## Schottky Barrier Diode



### Features

- Epoxy meets UL-94 V-0 flammability rating, halogen-free
- Moisture Sensitivity Level 1
- Low Forward Voltage
- Surface Mount device



### Marking

BAT64	63S
BAT64-04	64S
BAT64-05	65S
BAT64-06	66S

### ■Maximum Rating, ( $T_A=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Value
Continuous Reverse Voltage	$V_R$	V	40
Forward Continuous Current, Per Leg	$I_F$	mA	250
Non-Repetitive Peak Forward Surge Current @ $t < 1\text{s}$	$I_{FSM}$	A	0.6
Total Power Dissipation @ $T_A=25^{\circ}\text{C}$	$P_D$	mW	200
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	$^{\circ}\text{C}/\text{W}$	500
Junction Temperature	$T_J$	$^{\circ}\text{C}$	-55 to +125
Storage temperature range	$T_{stg}$	$^{\circ}\text{C}$	-55 to +125

### ■Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT64	F2	Approximate 0.008	3000	30000	120000	7" reel
BAT64-04	F2	Approximate 0.008	3000	30000	120000	7" reel
BAT64-05	F2	Approximate 0.008	3000	30000	120000	7" reel
BAT64-06	F2	Approximate 0.008	3000	30000	120000	7" reel



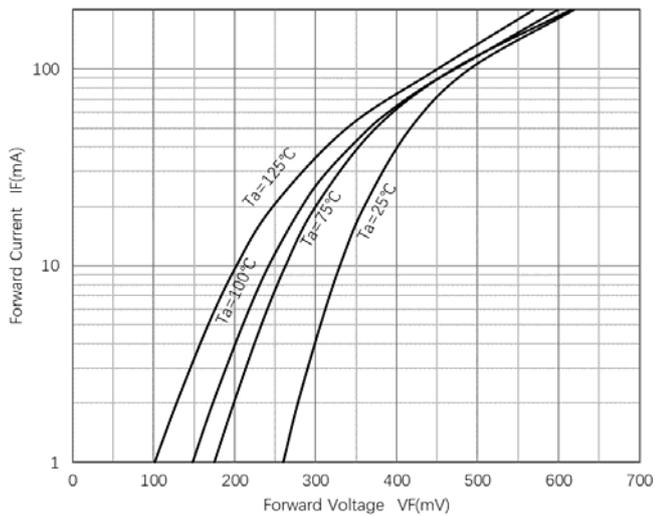
# BAT64 THRU BAT64-06

## ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

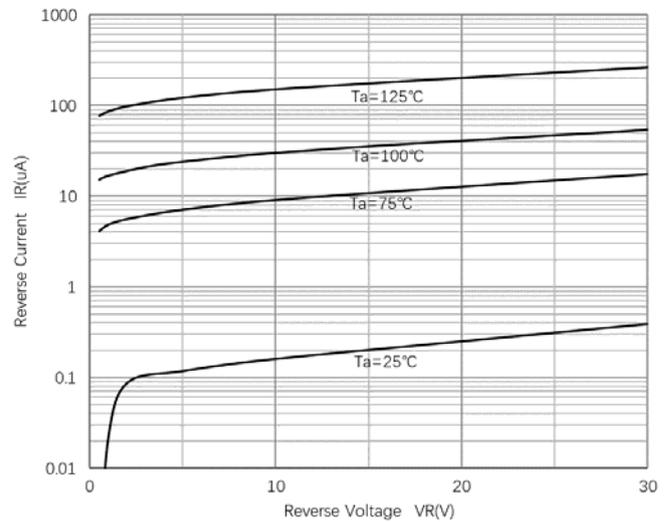
Item	Symbol	Unit	Conditions	Value
Minimum Breakdown Voltage	$V_R$	V	$I_R=0.1\text{mA}$	40
Maximum Instantaneous Forward Voltage	$V_F$	mV	$I_F=1\text{mA}$	350
			$I_F=10\text{mA}$	430
			$I_F=30\text{mA}$	520
			$I_F=100\text{mA}$	750
Maximum DC Reverse Current	$I_R$	$\mu\text{A}$	$V_R=25\text{V}$	2
Typical Junction Capacitance	$C_j$	pF	$f=1.0\text{MHz}$ , $V_R=1.0\text{V}$	10

## ■ Typical Characteristics

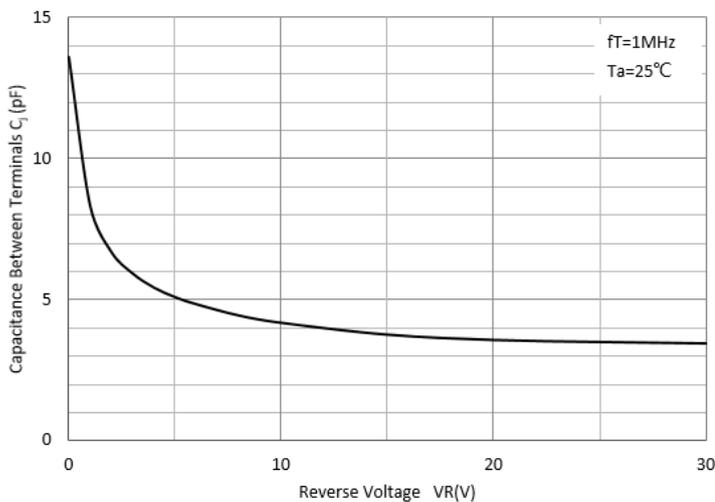
VF-IF



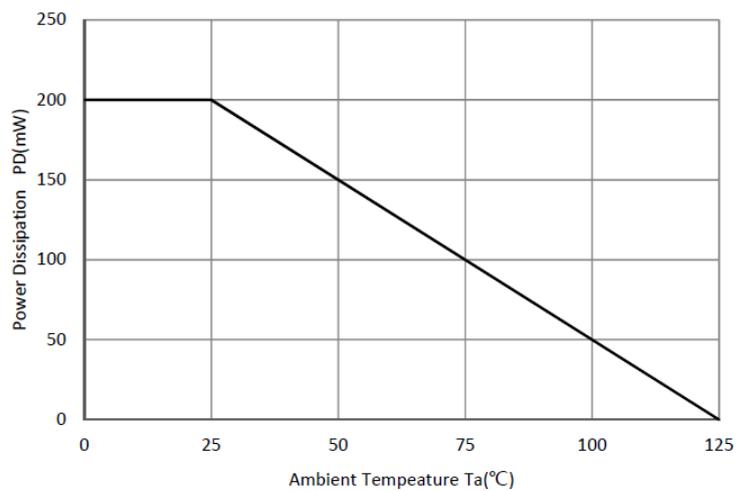
IR-VR



Cj-VR



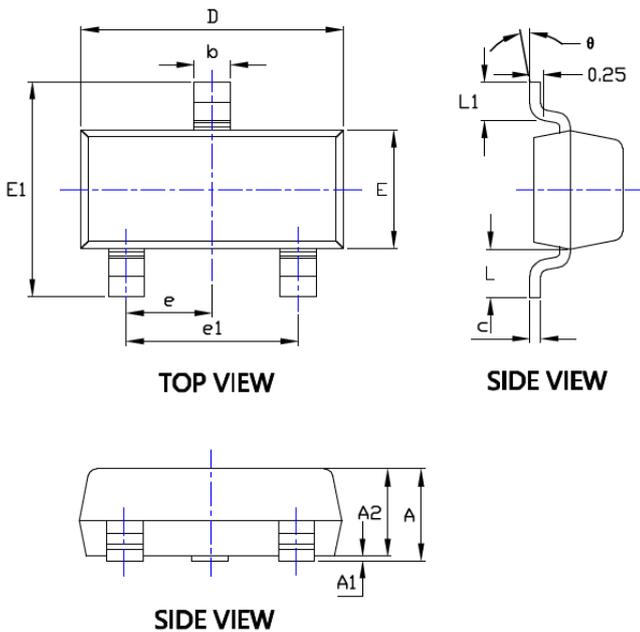
Power Derating Curve





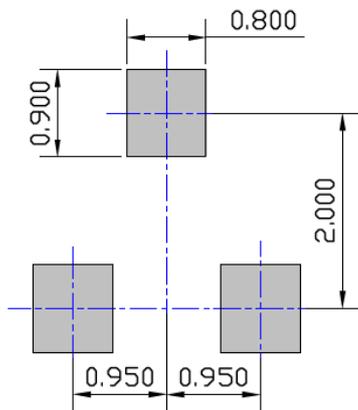
# BAT64 THRU BAT64-06

## ■SOT-23 Package Outline Dimensions



SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.045	0.900	1.150
A1	0.000	0.004	0.000	0.100
A2	0.035	0.041	0.900	1.050
b	0.012	0.020	0.300	0.500
c	0.004	0.008	0.100	0.200
D	0.110	0.118	2.800	3.000
E	0.047	0.055	1.200	1.400
E1	0.089	0.100	2.250	2.550
e	0.037TYP		0.950TYP	
e1	0.071	0.079	1.800	2.000
L	0.022REF		0.550REF	
L1	0.012	0.020	0.300	0.500
$\theta$	0°	8°	0°	8°

## ■SOT-23 Soldering Footprint



UNIT: mm

### Note:

- All dimensions are in millimeters (mm) unless otherwise specified.  
[所有尺寸均以毫米为单位, 除非另有说明]
- General tolerances:  $\pm 0.10$ mm unless otherwise specified.  
[通用公差为 $\pm 0.10$ mm, 除非另有说明]
- Dimensions and tolerances per ASME Y14.5M-2018.  
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
- All dimensions shown are exclusive of burrs and gate residues. Burrs and gate vestiges shall not exceed 0.15 mm in maximum.  
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
- Dimension b does not include dambar protrusion of max 0.100 mm per side.  
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
- Dimensions D and E are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.  
[D和E是塑封体的外部极限尺寸, 不包括包封溢料、内引线溢料、凸出部分以及胶体毛刺, 但是包含了包封错位的最大尺寸]
- Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.  
[成型的管脚应为同一平面, 共面性最大为0.1mm]



## BAT64 THRU BAT64-06

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### Disclaimer

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