

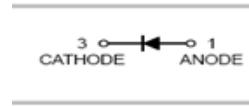
Features

- For low-loss, fast-recovery,
Meter protection, bias isolation
And clamping application
- Low forward voltage

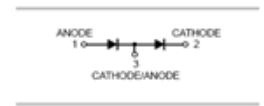
HF

Mechanical Data

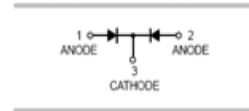
- Case: SOT-23
- Molding compound, UL flammability classification
rating 94V-0
- Terminals: Tin plated leads, solderable per
MIL-STD-202, Method 208



BAT64



BAT64-04



BAT64-05



BAT64-06



SOT-23

Ordering Information

Part Number	Package	Shipping	Marking Code
BAT64	SOT-23	3000pcs / Tape & Reel	63
BAT64-04	SOT-23	3000pcs / Tape & Reel	64
BAT64-05	SOT-23	3000pcs / Tape & Reel	65
BAT64-06	SOT-23	3000pcs / Tape & Reel	66

Maximum Ratings (@T_A=25°C unless otherwise specified)

Parameter	Symbol	Limits	Unit
Diode Reverse Voltage	V _R	40	V
Forward Current	I _F	250	mA
Non-Repetitive Peak Surge Forward Current	I _{FSM}	800	mA
Average Rectified Forward Current(50/60Hz,sinus)	I _{FAV}	120	mA

Thermal Characteristics

Parameter	Symbol	Limits	Unit
Power Dissipation	P _D	350	mW
Thermal Resistance, Junction to Ambient Air	R _{θJA} *	286	°C/W
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

* Part mounted on FR-4 board with recommended pad layout

Electrical Characteristics (@T_A=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V _(BR)	I _R =10mA	40	-	-	V
Forward Voltage *1	V _F	I _F =1mA	0.23	0.32	0.35	V
		I _F =10mA	0.30	0.385	0.43	
		I _F =30mA	0.36	0.44	0.52	
		I _F =100mA	0.47	0.57	0.75	
Reverse Leakage Current *2	I _R	V _R =30V	-	-	2	uA
Capacitance Between Terminals	C _T	V _R =1V, f=1MHz	-	-	10	pF
Reverse Recovery Time	t _{rr}	I _F =I _R =10mA I _{rr} =1.0mA, R _L =100Ω	-	-	5	ns

*1: pulse test, t_p≤300μs

*2: pulse test, t_p≤5ms

Ratings and Characteristic Curves (T_A=25°C unless otherwise noted)

FIG 1. TYPICAL REVERSE CHARACTERISTIC

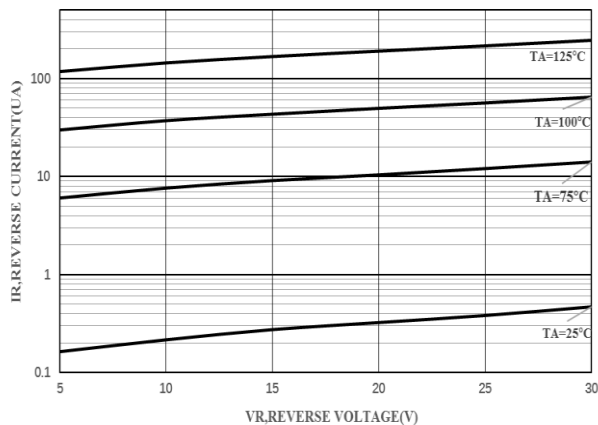


FIG 2. TYPICAL FORWARD CHARACTERISTIC

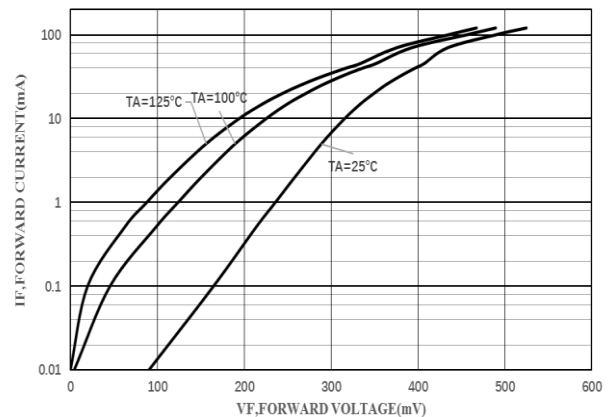


FIG 3. CAPACITANCE VS REVERSE VOLTAGE

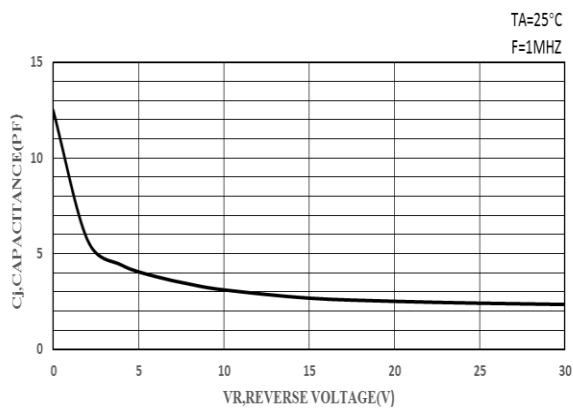
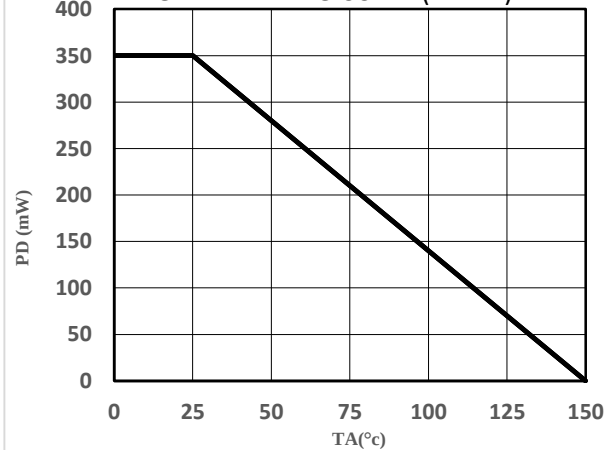
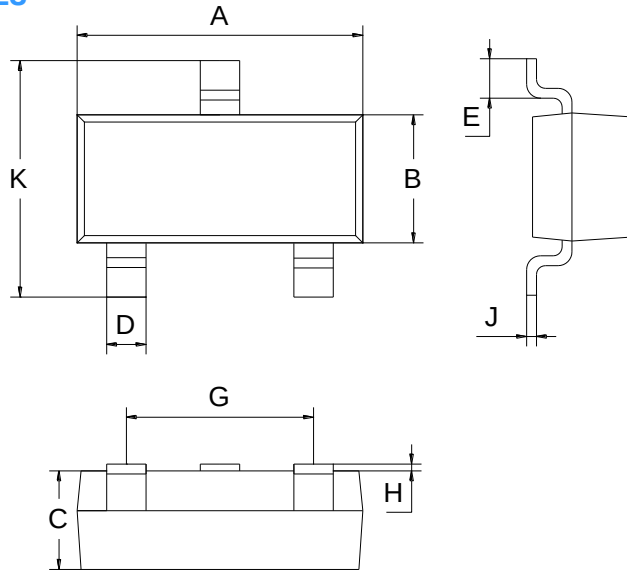


FIG 4. DERATING CURVE (PD-TA)



Package Outline Dimensions (unit: mm)

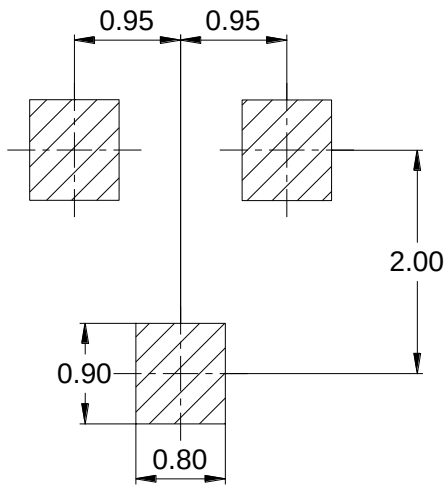
SOT-23



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	0.90	1.10
D	0.30	0.50
E	0.35	0.48
G	1.80	2.00
H	0.02	0.10
J	0.05	0.15
K	2.20	2.60

Mounting Pad Layout (unit: mm)

SOT-23



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