General Purpose PIN Diode

BAP64-04 BAP64-05 BAP64-06

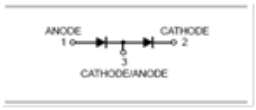
Features

HF

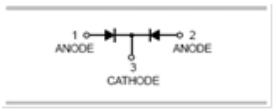
- Low diode capacitance
- Low diode forward resistance

Mechanical Data

- Case: SOT-23
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte Tin-Plated Leads, Solderability-per MIL-STD-202, Method 208



BAP64-04
SOT-23



BAP64-05
SOT-23

BAP64-06
SOT-23

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
BAP64-04	SOT-23	3000 pcs / Tape & Reel	4K
BAP64-05	SOT-23	3000 pcs / Tape & Reel	5K
BAP64-06	SOT-23	3000 pcs / Tape & Reel	6K

Maximum Ratings (@ T_A = 25℃ unless otherwise specified)

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	175	V
Forward Current	I_F	100	mA

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation (T_A=90°C)	P_D	250	mW
Thermal Resistance Junction-to-Air	$R_{\theta JA}$	500	°C/W
Operating Junction Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Electrical Characteristics (@ T_A = 25℃ unless otherwise specified)

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
I_R	Reverse Voltage Leakage Current	V_R = 175V	-	-	10	μA
		V_R = 20V	-	-	1	μA
V_F	Forward Voltage	I_F = 50mA	-	-	1.1	V
C_{d1}	Diode Capacitance	V_R = 0V, f=1MHz	-	0.52	-	pF
C_{d2}		V_R = 1V, f=1MHz	-	0.37	0.50	pF
C_{d3}		V_R =20V, f=1MHz	-	0.23	0.35	pF
R_{D1}	Diode Forward Resistance	I_F = 0.5mA, f = 100MHz	-	20	40	Ω
R_{D2}		I_F = 1mA, f = 100MHz	-	10	20	Ω
R_{D3}		I_F = 10mA, f = 100MHz	-	2	3.8	Ω
R_{D4}		I_F = 100mA, f = 100MHz	-	0.7	1.35	Ω

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

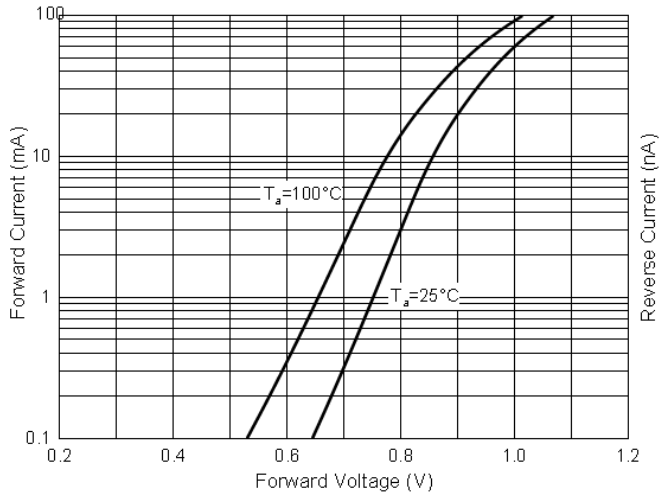


Fig. 1 - Forward Characteristics

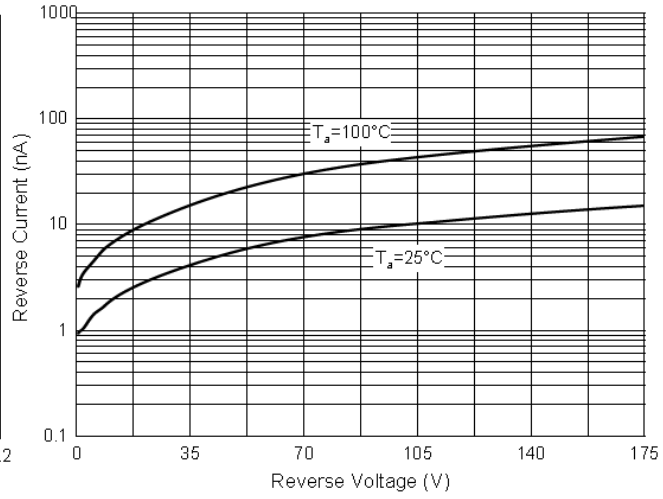


Fig. 2 - Reverse Characteristics

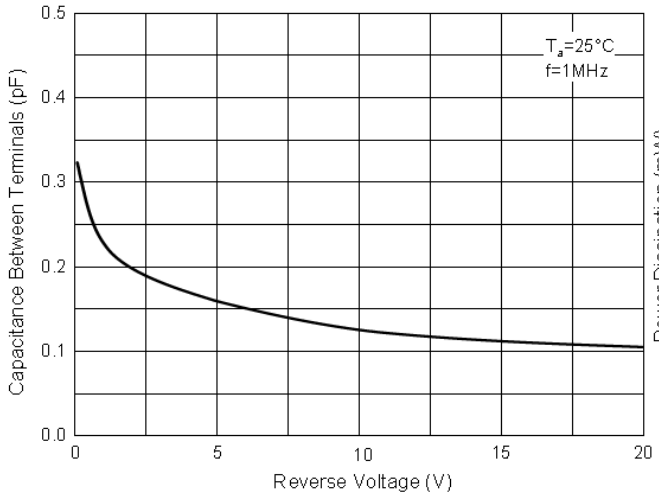


Fig. 3 - Capacitance Characteristics

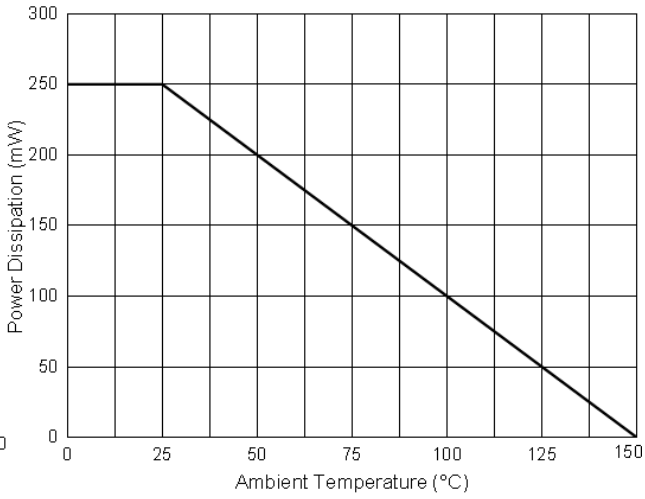
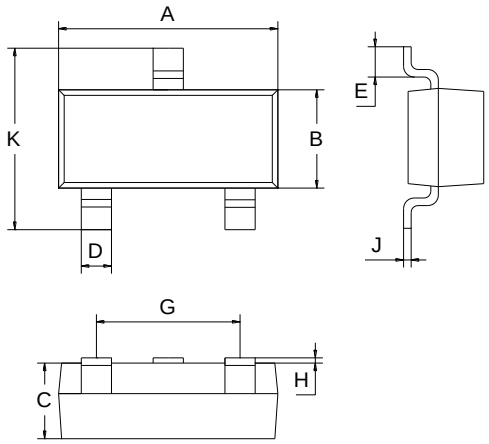


Fig. 4 - Power Derating Curve

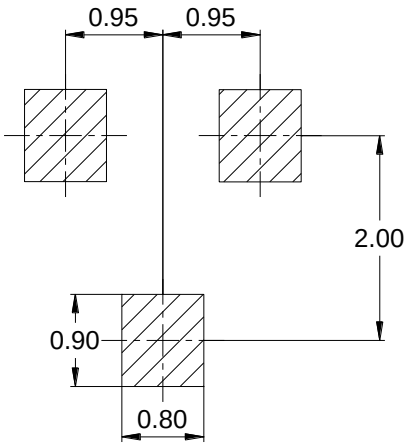
Package Outline Dimensions (Unit: mm)



SOT-23		
Dimension	**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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