



BAP64-04

Preliminary

DIODE

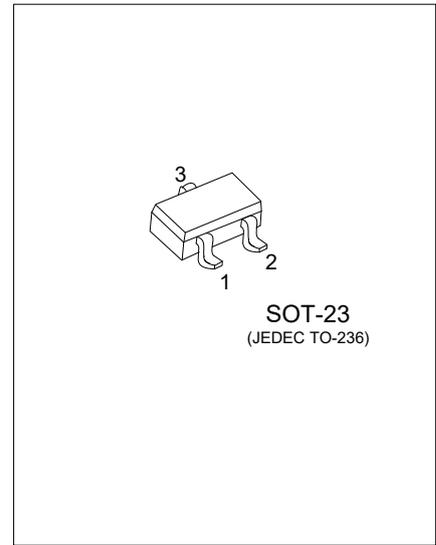
SILICON PIN DIODES

DESCRIPTION

The UTC **BAP64-04** is General-purpose PIN diode in an SOD-323 small plastic SMD package.

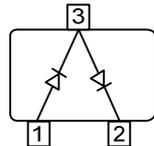
FEATURES

- * High voltage, current controlled
- * RF resistor for RF attenuators and switches
- * Low diode capacitance
- * Low diode forward resistance
- * Low series inductance
- * For applications up to 3 GHz



SYMBOL

Common Cathode



Anode Cathode

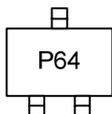
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
BAP64-04L-AE3-R	BAP64-04G-AE3-R	SOT-23	A	K	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode K: Common Cathode

<p>BAP64-04G-AE3-R</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Green Package</p>	<p>(1) R: Tape Reel</p> <p>(2) AE3: SOT-23</p> <p>(3) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNITS
Reverse Voltage	V_R	175	V
Forward Current	I_F	100	mA
Power Dissipation ($T_J=90^{\circ}\text{C}$)	P_D	250	mW
Junction Temperature	T_J	-65 ~ +150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65 ~ +150	$^{\circ}\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Case	θ_{JC}	500	$^{\circ}\text{C/W}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Voltage	V_R	$I_R=10\mu\text{A}$	175			V
Reverse Current	I_R	$V_R=175\text{V}$			10	μA
		$V_R=20\text{V}$			1	μA
Forward Voltage	V_F	$I_F=50\text{mA}$		0.9	1.1	V
Diode Capacitance	C_d	$V_R=0\text{V}$, $f=1\text{MHz}$		0.86		pF
		$V_R=1\text{V}$, $f=1\text{MHz}$		0.68		pF
		$V_R=5\text{V}$, $f=1\text{MHz}$		0.55		pF

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