

**BAP70-03**

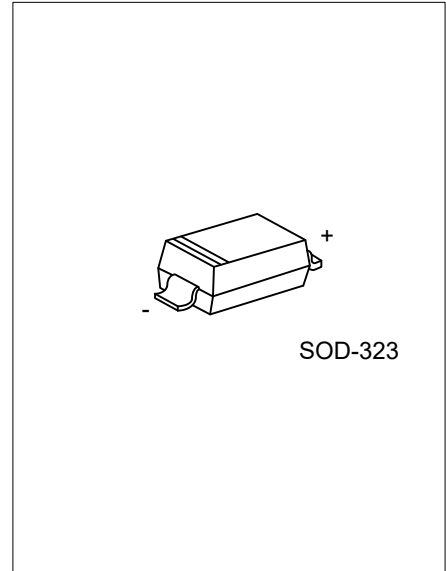
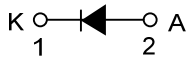
Preliminary

DIODE**SILICON PIN DIODES****DESCRIPTION**

The UTC **BAP70-03** is General-purpose PIN diode in an SOD-323 small plastic SMD package.

FEATURES

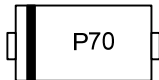
- * High voltage, current controlled RF resistor for attenuators and switches
- * Low diode capacitance
- * Very low series inductance

SYMBOL**ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment		Packing
Lead Free	Halogen Free		1	2	
BAP70-03L-CB2-R	BAP70-03G-CB2-R	SOD-323	K	A	Tape Reel

Note: Pin Assignment: K: Cathode A: Anode

BAP70-03G-CB2-R	
	(1) R: Tape Reel (2) CB2: SOD-323 (3) G: Halogen Free and Lead Free, L: Lead Free

MARKING

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

PARAMETER	SYMBOL	RATINGS	UNITS
Reverse Voltage	V_R	50	V
Forward Current	I_F	100	mA
Power Dissipation ($T_{SP}=90^{\circ}\text{C}$)	P_D	500	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}	250	$^{\circ}\text{C/W}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Voltage	V_R	$I_R=10\mu\text{A}$	50			V
Reverse Current	I_R	$V_R=50\text{V}$			100	nA
Forward Voltage	V_F	$I_F=50\text{mA}$		0.9	1.1	V
Diode Capacitance	C_d	$V_R=0\text{V}$, $f=1\text{MHz}$		680		fF
		$V_R=1\text{V}$, $f=1\text{MHz}$		500		fF
		$V_R=5\text{V}$, $f=1\text{MHz}$		390		fF

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