



## BZT52CXXXS

Preliminary

ZENER DIODE

### SURFACE MOUNT ZENER DIODE

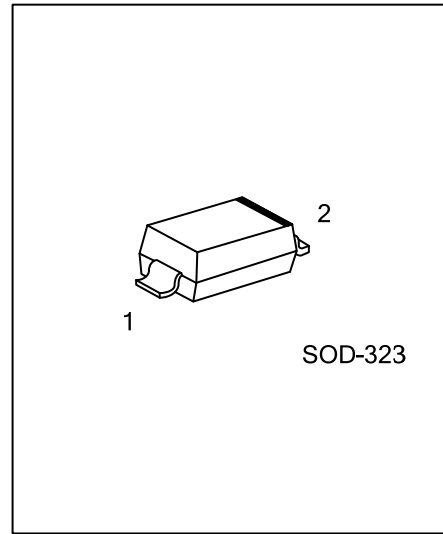
#### DESCRIPTION

The UTC **BZT52CXXXS** is surface mount zener diode. it uses UTC's advanced technology to provide the customers with low leakage current, etc.

The UTC **BZT52CXXXS** is suitable for automated assembly processes, etc.

#### FEATURES

\* Low leakage current



#### ORDERING INFORMATION

Ordering Number	Package	Pin Assignment		Packing
		1	2	
BZT52C5V1SG-CB2-R	SOD-323	A	K	Tape Reel
BZT52C5V6SG-CB2-R	SOD-323	A	K	Tape Reel
BZT52C6V2SG-CB2-R	SOD-323	A	K	Tape Reel
BZT52C16SG-CB2-R	SOD-323	A	K	Tape Reel
BZT52C30SG-CB2-R	SOD-323	A	K	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

<p>BZT52CXXXSG-CB2-R</p> <p>(1) Packing Type</p> <p>(2) Package Type</p> <p>(3) Green Package</p> <p>(4) Output Voltage</p>	<p>(1) R: Tape Reel</p> <p>(2) CB2: SOD-323</p> <p>(3) G: Halogen Free and Lead Free</p> <p>(4) refer to MARKING INFORMATION</p>
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#### MARKING INFORMATION

PACKAGE	VOLTAGE CODE	MARKING
SOD-323	5.1: 5.1V 5.6: 5.6V 6.2: 6.2V 16: 16V 30: 30V	

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

Single phase, half wave, 60Hz, resistive or inductive load. For capacitance load, derate current by 20%.

PARAMETER	SYMBOL	RATINGS	UNIT	
Forward Voltage (Note)	$I_F=10\text{mA}$	$V_F$	0.9	V
<b>Thermal characteristics</b>				
Power Dissipation (Note 2)	$P_D$	200	mW	
Operating Temperature	$T_J$	-55~+150	$^\circ\text{C}$	
Storage Temperature	$T_{STG}$	-55~+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.

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

( $V_F = 0.9\text{V Max @ } I_F = 10\text{mA}$  for all types.)

Device	Marking Code	Nominal Zener Voltage			Max Zener Impedance				Max Reverse Leakage Current (Note)	
		$V_Z @ I_{ZT}$ (V)			$Z_{ZT} @ I_{ZT}$		$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$	
		MIN	TYP	MAX	( $\Omega$ )	(mA)	( $\Omega$ )	(mA)	( $\mu\text{A}$ )	(V)
BZT52C5V1S	5.1	4.8	5.1	5.4	60	5	480	1.0	1	2.0
BZT52C5V6S	5.6	5.20	5.60	6.00	40	5	400	1.0	3	2.0
BZT52C6V2S	6.2	5.80	6.20	6.60	10	5	150	1.0	2	4.0
BZT52C16S	16	15.30	16.00	17.10	40	5	200	1.0	0.1	11.2
BZT52C30S	30	28.00	30.00	32.00	80	2	300	0.5	0.1	21

Note: Short duration pulse test used to minimize self-heating effect.

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