

**BZT52CXXXS****ZENER DIODE****SURFACE MOUNT ZENER DIODE****DESCRIPTION**

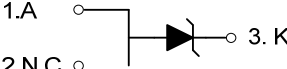
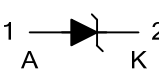
The UTC **BZT52CXXXS** is surface mount zener diode. it uses UTC's advanced technology to provide the customers with low leakage current, etc.

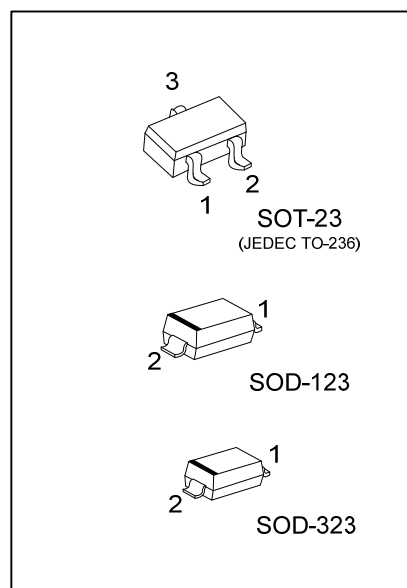
The UTC **BZT52CXXXS** is suitable for automated assembly processes, etc.

FEATURES

* Low leakage current

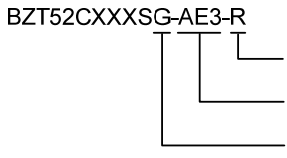
SYMBOL

SOT-23	SOD-123 / SOD-323
	

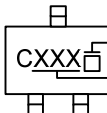
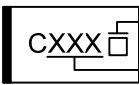
**ORDERING INFORMATION**

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
BZT52CXXXSL-AE3-R	BZT52CXXXSG-AE3-R	SOT-23	A	NC	K	Tape Reel
BZT52CXXXSL-CA2-R	BZT52CXXXSG-CA2-R	SOD-123	A	K	-	Tape Reel
BZT52CXXXSL-CB2-R	BZT52CXXXSG-CB2-R	SOD-323	A	K	-	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode

	(1) Packing Type (2) Package Type (3) Green Package	(1) R: Tape Reel (2) AE3: SOT-23, CA2: SOD-123, CB2: SOD-323 (3) G: Halogen Free and Lead Free, L: Lead Free
---	--	---

MARKING INFORMATION

PACKAGE	VOLTAGE CODE		MARKING
SOT-23	2.0: 2.0V	10: 10V	 L: Lead Free G: Halogen Free Voltage Code
	2.4: 2.4V	11: 11V	
	2.7: 2.7V	12: 12V	
	3.0: 3.0V	13: 13V	
	3.3: 3.3V	15: 15V	
	3.6: 3.6V	16: 16V	
	3.9: 3.9V	18: 18V	
	4.3: 4.3V	20: 20V	
	4.7: 4.7V	22: 22V	
	5.1: 5.1V	24: 24V	
SOD-123 SOD-323	5.6: 5.6V	27: 27V	 L: Lead Free G: Halogen Free Voltage Code
	6.2: 6.2V	30: 30V	
	6.8: 6.8V	33: 33V	
	7.5: 7.5V	36: 36V	
	8.2: 8.2V	39: 39V	
	9.1: 9.1V		

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°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 =10mA	V _F	0.9	V
Thermal characteristics				
Power Dissipation	SOT-23	P _D	410	mW
	SOD-123		200	mW
	SOD-323			
Operating Temperature		T _J	-55 ~ +150	°C
Storage Temperature		T _{STG}	-55 ~ +150	°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°C, unless otherwise specified)

(V_F = 0.9V Max @ I_F = 10mA for all types.)

Part Number	Marking Code	Nominal Zener Voltage			Max Zener Impedance				Max Reverse Leakage Current (Note)	
		V _Z @ I _{ZT} (V)			Z _{YT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R	
		MIN	TYP	MAX	(Ω)	(mA)	(Ω)	(mA)	(μA)	(V)
BZT52C2V0S	2.0	1.91	2.00	2.09	100	5	600	1.0	150	1.0
BZT52C2V4S	2.4	2.20	2.40	2.60	100	5	600	1.0	50	1.0
BZT52C2V7S	2.7	2.50	2.70	2.90	100	5	600	1.0	20	1.0
BZT52C3S	3.0	2.80	3.00	3.20	100	5	600	1.0	10	1.0
BZT52C3V3S	3.3	3.10	3.30	3.50	95	5	600	1.0	5	1.0
BZT52C3V6S	3.6	3.40	3.60	3.80	95	5	600	1.0	5	1.0
BZT52C3V9S	3.9	3.70	3.90	4.10	90	5	600	1.0	3	1.0
BZT52C4V3S	4.3	4.00	4.30	4.60	90	5	600	1.0	3	1.0
BZT52C4V7S	4.7	4.40	4.70	5.00	90	5	500	1.0	2	2.0
BZT52C5V1S	5.1	4.80	5.10	5.40	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
BZT52C6V8S	6.8	6.40	6.80	7.20	15	5	80	1.0	1	4.0
BZT52C7V5S	7.5	7.00	7.50	7.90	15	5	80	1.0	0.7	5.0
BZT52C8V2S	8.2	7.70	8.20	8.70	15	5	80	1.0	0.5	5.0
BZT52C9V1S	9.1	8.50	9.10	9.60	15	5	100	1.0	0.2	6.0
BZT52C10S	10	9.40	10.00	10.60	15	5	150	1.0	0.1	7.0
BZT52C11S	11	10.40	11.00	11.60	15	5	150	1.0	0.1	8.0
BZT52C12S	12	11.40	12.00	12.70	25	5	150	1.0	0.1	8.0
BZT52C13S	13	12.40	13.00	14.10	30	5	170	1.0	0.1	8.0
BZT52C15S	15	13.80	15.00	15.60	30	5	200	1.0	0.1	10.5
BZT52C16S	16	15.30	16.00	17.10	40	5	200	1.0	0.1	11.2
BZT52C18S	18	16.80	18.00	19.10	45	5	225	1.0	0.1	12.6
BZT52C20S	20	18.80	20.00	21.20	55	5	225	1.0	0.1	14.4
BZT52C22S	22	20.80	22.00	23.30	55	5	250	1.0	0.1	16.4
BZT52C24S	24	22.80	24.00	25.60	70	5	250	1.0	0.1	18.4
BZT52C27S	27	25.10	27.00	28.90	80	2	300	0.5	0.1	21.4
BZT52C30S	30	28.00	30.00	32.00	80	2	300	0.5	0.1	24.4
BZT52C33S	33	31.00	33.00	35.00	80	2	325	0.5	0.1	27.4
BZT52C36S	36	34.00	36.00	38.00	90	2	350	0.5	0.1	30.4
BZT52C39S	39	37.00	39.00	41.00	130	2	350	0.5	0.1	33.4

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

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.