



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

BZT52C2V4

THRU

BZT52C39

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT ZENER DIODES

FEATURES

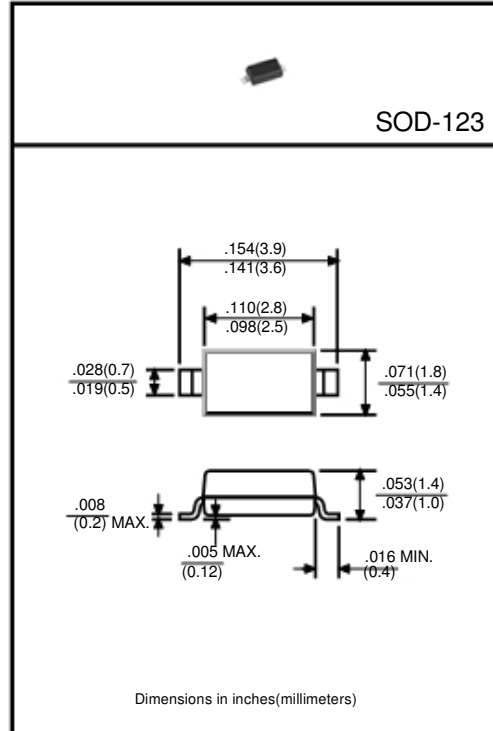
- * Planar Die construction
- * Zener Voltages from 2.4V - 39V
- * 410mW Power Dissipation
- * Ideally Suited for Automated Assembly Processes

MECHANICAL DATA

- * Case: Molded Plastic
- * Terminals: Solder plated, solderable per MIL-STD-202, Method 208
- * Polarity: See Diagram Below
- * Mounting position: Any
- * Weight: 0.008 gram Approx.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.



	SYMBOL	VALUE	UNITS
Zener Current see Table "Characteristics"			
Power Dissipation (Notes 1) at Tamb=25°C	P _{tot}	410	mW
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) (Notes 2)	I _{FSM}	2.0	Amps
Maximum Forward Voltage at I _F =100mA	V _F	1.2	Volts
Operating and Storage Temperature	T _J , T _{stg}	-55 to + 150	°C

Notes: 1. Mounted on 5.0mm² (.013mm thick) land areas.

2. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

RATING AND CHARACTERISTIC CURVES (BZT52C SERIES)

TYPE	Nominal Zener Voltage V _Z @I _{ZT}		Zener Test Current I _{ZT}	Maximum Zener Impedance		I _{ZK}	Maximum Reverse Leakage Current		Typical Temperature Coefficient	Max. Zener Current I _{ZM} @T _A	Marking Code
	Min	Max		Z _{ZT} @I _{ZT}	Z _{ZT} @I _{ZK}		I _R @ V _R				
			mA	Ohms	Ohms	mA	μA	Volts	% / °C	mA	
BZT52C2V4	2.28	2.56	5	85	600	1	100	1.0	-0.075	-	WX
BZT52C2V7	2.5	2.9	5	83	500	1	75	1.0	-0.065	134	W1
BZT52C3V0	2.8	3.2	5	95	500	1	50	1.0	-0.060	118	W2
BZT52C3V3	3.1	3.5	5	95	500	1	25	1.0	-0.055	109	W3
BZT52C3V6	3.4	3.8	5	95	500	1	15	1.0	-0.055	100	W4
BZT52C3V9	3.7	4.1	5	95	500	1	10	1.0	-0.050	92	W5
BZT52C4V3	4.0	4.6	5	95	500	1	5	1.0	-0.035	84	W6
BZT52C4V7	4.4	5.0	5	78	500	1	5	1.0	-0.015	76	W7
BZT52C5V1	4.8	5.4	5	60	480	1	0.1	0.8	+0.005	67	W8
BZT52C5V6	5.2	6.0	5	40	400	1	0.1	1.0	+0.020	59	W9
BZT52C6V2	5.8	6.6	5	10	200	1	0.1	2.0	+0.030	54	WA
BZT52C6V8	6.4	7.2	5	8	150	1	0.1	3.0	+0.045	49	WB
BZT52C7V5	7.0	7.9	5	7	50	1	0.1	5.0	+0.050	44	WC
BZT52C8V2	7.7	8.7	5	7	50	1	0.1	6.0	+0.055	40	WD
BZT52C9V1	8.5	9.6	5	10	50	1	0.1	7.0	+0.065	36	WE
BZT52C10	9.4	10.6	5	15	70	1	0.1	7.5	+0.070	33	WF
BZT52C11	10.4	11.6	5	20	70	1	0.1	8.5	+0.075	30	WG
BZT52C12	11.4	12.7	5	20	90	1	0.1	9.0	+0.080	28	WH
BZT52C13	12.4	14.1	5	25	110	1	0.1	10	+0.080	25	WI
BZT52C15	13.8	15.6	5	30	110	1	0.1	11	+0.090	23	WJ
BZT52C16	15.3	17.1	5	40	170	1	0.1	12	+0.090	20	WK
BZT52C18	16.8	19.1	5	50	170	1	0.1	14	+0.090	18	WL
BZT52C20	18.8	21.2	5	50	220	1	0.1	15	+0.090	17	WM
BZT52C22	20.8	23.3	5	55	220	1	0.1	17	+0.090	16	WN
BZT52C24	22.8	25.6	5	80	220	1	0.1	18	+0.090	13	WO
BZT52C27	25.1	28.9	5	80	250	1	0.1	20	+0.090	12	WP
BZT52C30	28	32	5	80	250	1	0.1	22.5	+0.090	10	WQ
BZT52C33	31	35	5	80	250	1	0.1	25	+0.090	9	WR
BZT52C36	34	38	5	90	250	1	0.1	27	+0.090	9	WS
BZT52C39	37	41	5	90	300	1	0.1	29	+0.110	8	WT

NOTE: Standard Zener Voltage Tolerance ± 5%

