

SURFACE MOUNT ZENER DIODE

VOLTAGE RANGE 3 to 39 Volts POWER RATING 410 mWatts

FEATURES

- * Planar Die Construction
- * Ultra-Small Surface Mount Package
- * Ideally Suited for Automated Assembly Processes

MECHANICAL DATA

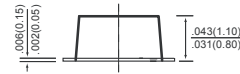
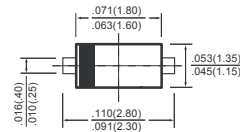
- * Case: Molded plastic
- * Epoxy: UL 94V-O rate flame retardant
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.004 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.



SOD-323 F



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (@ TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	VALUE	UNITS
Peak Forward Surge Current (1)	I _{FSM}	2.0	Amps
Max. Steady State Power Dissipation @TA=25°C (2)	P _D	410	mW
Max. Operating Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C
Max. Instantaneous Forward Voltage at I _F = 10mA	V _F	0.9	Volts

NOTES : 1. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle=4 pulses per minute maximum.
 2. Mounted on 5.0mm²(0.13mm thick) land areas.

ELECTRICAL CHARACTERISTICS (@TA=25°C unless otherwise specified)

TYPE	Zener voltage		Maximum Zener impedance				Reverse Leakage Current	
	V _Z @ I _{ZT}		Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @	V _R
	Volts		(Ω)	(mA)	(Ω)	(mA)	(uA)	(V)
	Min	Max	Max		Max		Max	
BZT52B 4V3S	4.21	4.39	95	5.0	500	1.0	5.0	1.0
BZT52B 4V7S	4.61	4.79	78	5.0	500	1.0	5.0	2.0
BZT52B 5V1S	5.00	5.20	60	5.0	480	1.0	0.1	0.8
BZT52B 5V6S	5.49	5.71	40	5.0	400	1.0	0.1	1.0
BZT52B 6V2S	6.08	6.32	10	5.0	200	1.0	0.1	2.0
BZT52B 6V8S	6.66	6.94	8	5.0	150	1.0	0.1	3.0
BZT52B 7V5S	7.35	7.65	7	5.0	50	1.0	0.1	5.0
BZT52B 8V2S	8.04	8.36	7	5.0	50	1.0	0.1	6.0
BZT52B 9V1S	8.92	9.28	10	5.0	50	1.0	0.1	7.0
BZT52B 10S	9.80	10.20	15	5.0	70	1.0	0.1	7.5
BZT52B 11S	10.78	11.22	20	5.0	70	1.0	0.1	8.5
BZT52B 12S	11.76	12.24	20	5.0	90	1.0	0.1	9.0
BZT52B 13S	12.74	13.26	25	5.0	110	1.0	0.1	10
BZT52B 14S	13.72	14.28	25	5.0	110	1.0	0.1	10.5
BZT52B 15S	14.70	15.30	30	5.0	110	1.0	0.1	11
BZT52B 16S	15.68	16.32	40	5.0	170	1.0	0.1	12
BZT52B 17S	16.66	17.34	40	5.0	170	1.0	0.1	13
BZT52B 18S	17.64	18.36	50	5.0	170	1.0	0.1	14
BZT52B 20S	19.60	20.40	50	5.0	220	1.0	0.1	15
BZT52B 22S	21.56	22.44	55	5.0	220	1.0	0.1	17
BZT52B 24S	23.52	24.48	80	5.0	220	1.0	0.1	18
BZT52B 27S	26.46	27.54	80	5.0	250	1.0	0.1	20
BZT52B 28S	27.44	28.56	80	5.0	250	1.0	0.1	22
BZT52B 30S	29.40	30.60	80	5.0	250	1.0	0.1	22.5
BZT52B 33S	32.34	33.66	80	5.0	250	1.0	0.1	25
BZT52B 36S	35.28	36.72	80	5.0	250	1.0	0.1	27
BZT52B 39S	38.22	39.78	80	5.0	300	1.0	0.1	29

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