

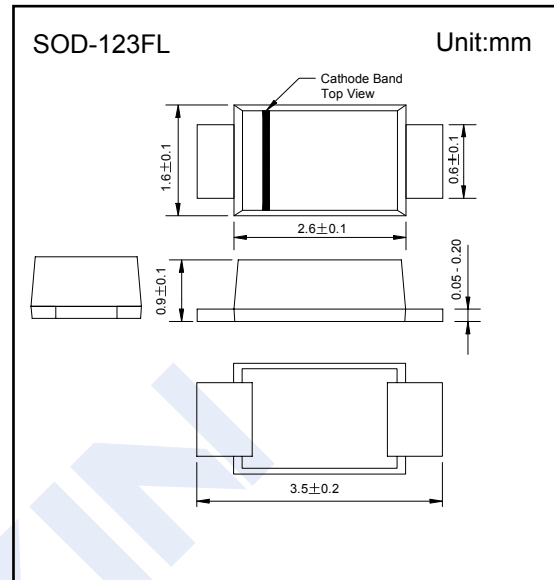
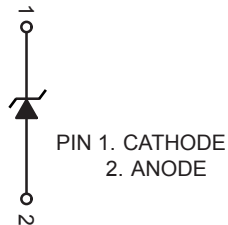
Zener Diodes

BZT52C2V4 ~ BZT52C75

(KZT52C2V4 ~ KZT52C75)

■ Features

- Wide Zener Voltage Range Selection, 2.4V to 75V
- VZ Tolerance Selection of $\pm 5\%$ (C Series)
- Surface Device Type Mounting
- Green EMC



■ Absolute Maximum Ratings Ta = 25°

Parameter	Symbol	Rating	Unit
Power Dissipation	P _D	500	mW
Junction Temperature	T _J	150	°C
Operating Temperature Range	T _{OPR}	-65 to 150	
Storage temperature range	T _{stg}	-65 to 150	

BZT52C2V4 ~ BZT52C75**(KZT52C2V4 ~ KZT52C75)**

■ Electrical Characteristics Ta = 25°C

Part Number	Vz @ Izr (Volt)			Izr (mA)	Zzr @ Izr (Ω) Max	Izk (mA)	Zzk @ Izk (Ω) Max	Ir @ Vr (μA) Max	Vr (V)	Device Marking
	Nom	Min	Max							
BZT52C2V4	2.4	2.28	2.52	5	100	1	564	45	1	2V4Z
BZT52C2V7	2.7	2.57	2.84	5	100	1	564	18	1	2V7Z
BZT52C3V0	3	2.85	3.15	5	100	1	564	9	1	3V0Z
BZT52C3V3	3.3	3.14	3.47	5	95	1	564	4.5	1	3V3Z
BZT52C3V6	3.6	3.42	3.78	5	90	1	564	4.5	1	3V6Z
BZT52C3V9	3.9	3.71	4.1	5	90	1	564	2.7	1	3V9Z
BZT52C4V3	4.3	4.09	4.52	5	90	1	564	2.7	1	4V3Z
BZT52C4V7	4.7	4.47	4.94	5	80	1	470	2.7	2	4V7Z
BZT52C5V1	5.1	4.85	5.36	5	60	1	451	1.8	2	5V1Z
BZT52C5V6	5.6	5.32	5.88	5	40	1	376	0.9	2	5V6Z
BZT52C6V2	6.2	5.89	6.51	5	10	1	141	2.7	4	6V2Z
BZT52C6V8	6.8	6.46	7.14	5	15	1	75	1.8	4	6V8Z
BZT52C7V5	7.5	7.11	7.86	5	15	1	75	0.9	5	7V5Z
BZT52C8V2	8.2	7.79	8.61	5	15	1	75	0.63	5	8V2Z
BZT52C9V1	9.1	8.65	9.56	5	15	1	94	0.45	6	9V1Z
BZT52C10	10	9.5	10.5	5	20	1	141	0.18	7	10VZ
BZT52C11	11	10.45	11.55	5	20	1	141	0.09	8	11VZ
BZT52C12	12	11.4	12.6	5	25	1	141	0.09	8	12VZ
BZT52C13	13	12.35	13.65	5	30	1	160	0.09	8	13VZ
BZT52C15	15	14.25	15.75	5	30	1	188	0.045	10.5	15VZ
BZT52C16	16	15.2	16.8	5	40	1	188	0.045	11.2	16VZ
BZT52C18	18	17.1	18.9	5	45	1	212	0.045	12.6	18VZ
BZT52C20	20	19	21	5	55	1	212	0.045	14	20VZ
BZT52C22	22	20.9	23.1	5	55	1	235	0.045	15.4	22VZ
BZT52C24	24	22.8	25.2	5	70	1	235	0.045	16.8	24VZ
BZT52C27	27	25.65	28.35	2	80	0.5	282	0.045	18.9	27VZ
BZT52C30	30	28.5	31.5	2	80	0.5	282	0.045	21	30VZ
BZT52C33	33	31.35	34.65	2	80	0.5	306	0.045	23	33VZ
BZT52C36	36	34.2	37.8	2	90	0.5	329	0.045	25.2	36VZ
BZT52C39	39	37.05	40.95	2	130	0.5	329	0.045	27.3	39VZ
BZT52C43	43	40.85	45.15	2	150	0.5	353	0.045	30.1	43VZ
BZT52C47	47	44.65	49.35	2	170	0.5	353	0.045	33	47VZ
BZT52C51	51	48.45	53.55	2	180	0.5	376	0.045	35.7	51VZ
BZT52C56	56	53.2	58.8	2	200	0.5	400	0.045	39.2	56VZ
BZT52C62	62	58.9	65.1	2	215	0.5	423	0.045	43.4	62VZ
BZT52C68	68	64.6	71.4	2	240	0.5	447	0.045	47.6	68VZ
BZT52C75	75	71.25	78.75	2	255	0.5	470	0.045	52.5	75VZ

V_F Forward Voltage = 900mV Maximum @ I_F = 10 mA for all types

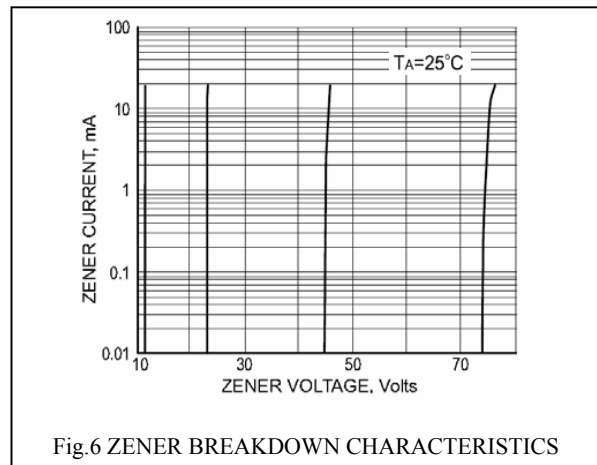
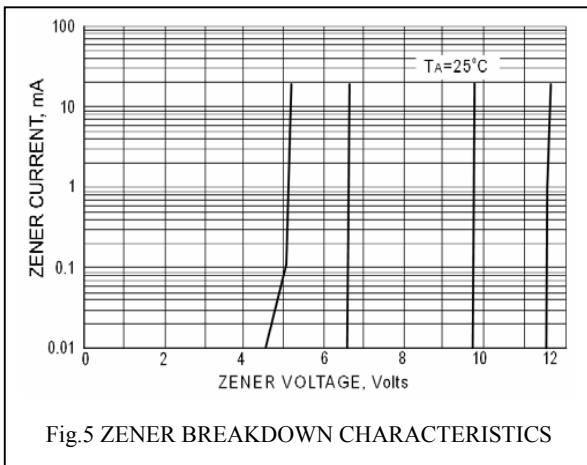
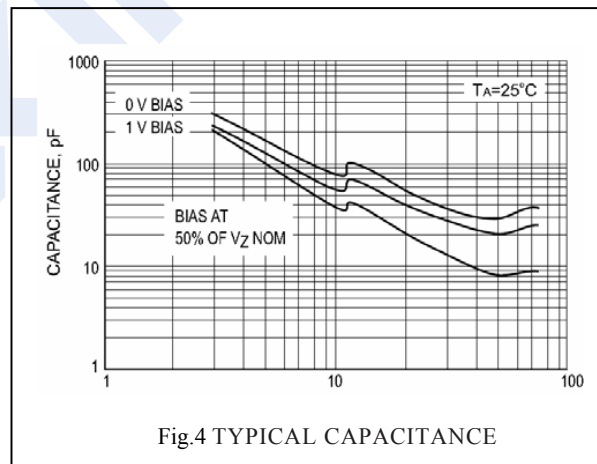
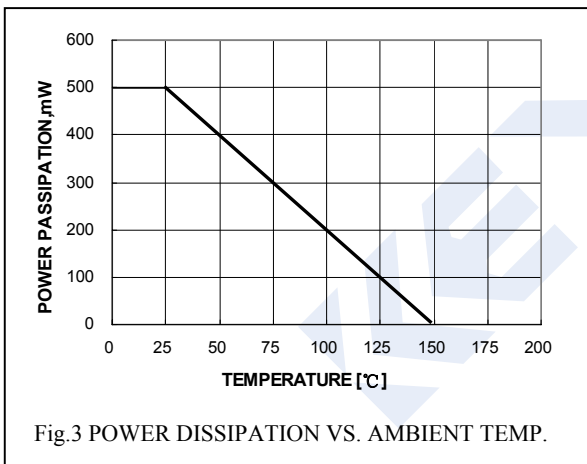
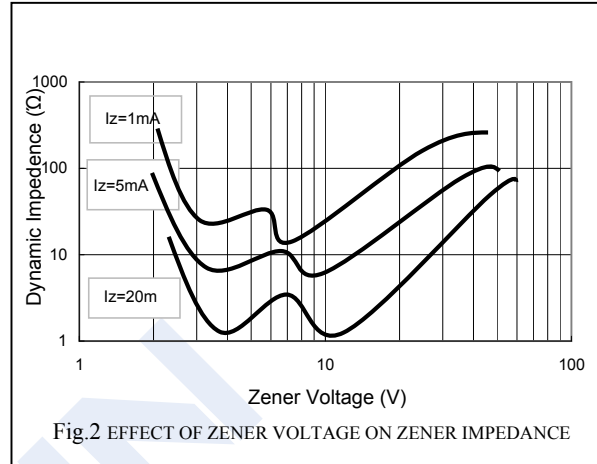
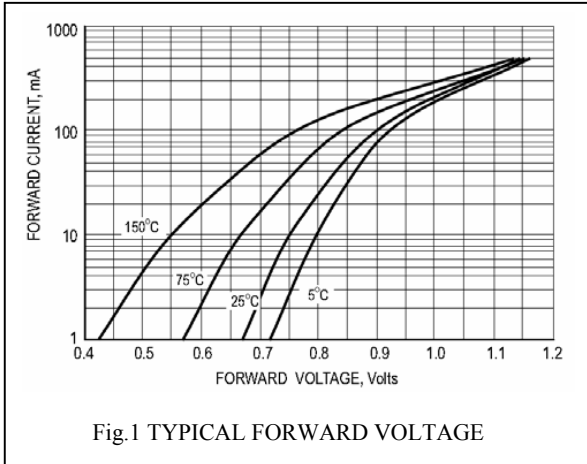
Notes:

1. The Zener Voltage (V_Z) is tested under pulse condition of 10ms.
2. The device numbers listed have a standard tolerance on the nominal zener voltage of **±5%**.
3. For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter voltage tolerances, contact your nearest **Taiwan semiconductor** representative.
4. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the DC zener current (I_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK}.

BZT52C2V4 ~ BZT52C75

(KZT52C2V4 ~ KZT52C75)

■ Typical Characteristics



BZT52C2V4 ~ BZT52C75**(KZT52C2V4 ~ KZT52C75)**

■ Typical Characteristics

