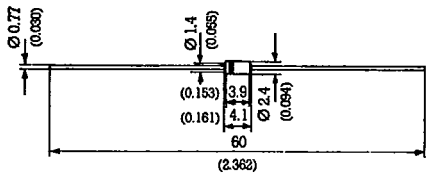
FAGOR

BZX85C2V7 ..... BZX85C33V

T-11-15

1.3 W Zener Diodes

Dimensions in mm. (inches) DO-41 (Glass)



Mounting instructions

1. Min. distance from body to soldering point, 4 mm.
2. Max. solder temperature, 300°C.
3. Max. soldering time, 3,5 sec.
4. Do not bend lead at a point closer than 2 mm. to the body.

Voltage
2.7 to 33 V.

Power
1.3 W

Standard Voltage Tolerance is ± 5 %

- Low cost
- DO-41 Glass case
- Terminals: Axial Leads
- Polarity: Color band denotes cathode

Maximum Ratings, according to IEC publication No. 134

P_{tot}	Power dissipation at Tamb = 25°C	1,3 W
T_j	Max. operating temperature	175°C
T_{stg}	Storage temperature range	− 65°C to + 175°C

Electrical Characteristics at Tamb = 25°C

V_F	Max. forward voltage drop at I_F = 200 mA	1,1 V
$R_{thj\text{-}a}$	Max. thermal resistance at: 10 mm. lead length	0,10°C/mW

FAGOR

T-11-15

BZX85

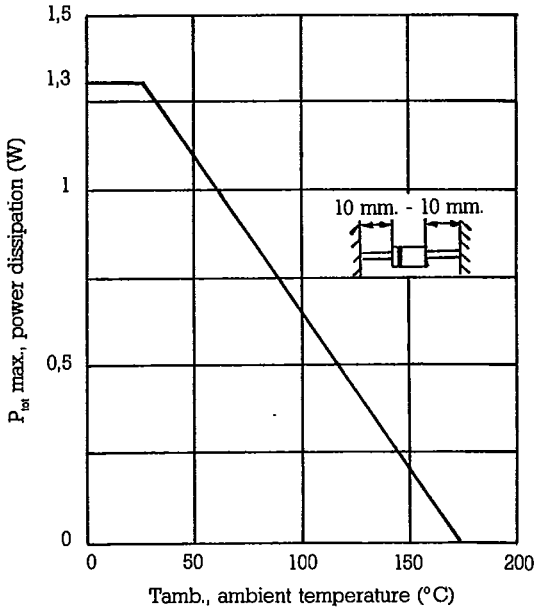
Type	Zener Voltage Range V_z	at I_{zt}	Maximum Zener Impedance Z_{zt} at I_{zt}	Z_{zk} at I_{zk}	I_{zk}	Typical Temperature Coefficient	Maximum Reverse Leakage Current I_R	at V_R	Surge Current (10 ms) I_{zs}	Maximum Regulator Current I_{zm}
	(V)	(mA)	(Ω)	(Ω)	(mA)	(%/°C)	(μA)	(V)	(mA)	(mA)
BZX85-C2V7	2.5-2.9	80	20	400	1	−0.070	150	1	3200	370
BZX85-C3V0	2.8-3.2	80	20	400	1	−0.070	100	1	3000	340
BZX85-C3V3	3.1-3.5	80	20	400	1	−0.070	40	1	2800	320
BZX85-C3V6	3.4-3.8	70	20	500	1	−0.065	20	1	2660	290
BZX85-C3V9	3.7-4.1	60	15	500	1	−0.045	10	1	2540	280
BZX85-C4V3	4.0-4.6	50	13	500	1	−0.020	3	1	2440	250
BZX85-C4V7	4.4-5.0	45	13	500	1	+0.005	3	1	2320	218
BZX85-C5V1	4.8-5.4	45	10	500	1	+0.015	1	1.5	2200	200
BZX85-C5V6	5.2-6.0	45	7	400	1	+0.022	1	2	2080	190
BZX85-C6V2	5.8-6.6	35	4	300	1	+0.032	1	3	1960	170
BZX85-C6V8	6.4-7.2	35	3.5	300	1	+0.038	1	4	1800	155
BZX85-C7V5	7.0-7.9	35	3	200	0.5	+0.043	1	4.5	1620	140
BZX85-C8V2	7.7-8.7	25	5	200	0.5	+0.050	1	5	1520	130
BZX85-C9V1	8.5-9.6	25	5	200	0.5	+0.055	1	6.5	1340	120
BZX85-C10	9.4-10.6	25	7	200	0.5	+0.060	0.5	7	1200	106
BZX85-C11	10.4-11.6	20	8	300	0.5	+0.062	0.5	7.7	1100	97
BZX85-C12	11.4-12.7	20	9	350	0.5	+0.065	0.5	8.4	1000	88
BZX85-C13	12.4-14.1	20	10	400	0.5	+0.068	0.5	9.1	900	79
BZX85-C15	13.8-15.6	15	15	500	0.5	+0.072	0.5	10.5	760	71
BZX85-C16	15.3-17.1	15	15	500	0.5	+0.072	0.5	11	700	66
BZX85-C18	16.8-19.1	15	20	500	0.5	+0.075	0.5	12.5	600	62
BZX85-C20	18.8-21.2	10	24	600	0.5	+0.075	0.5	14	540	56
BZX85-C22	20.8-23.3	10	25	600	0.5	+0.078	0.5	15.5	500	52
BZX85-C24	22.8-25.6	10	25	600	0.5	+0.078	0.5	17	450	47
BZX85-C27	25.1-28.9	8	30	750	0.25	+0.078	0.5	19	400	41
BZX85-C30	28-32	8	30	1000	0.25	+0.078	0.5	21	380	36
BZX85-C33	31-35	8	35	1000	0.25	+0.078	0.5	23	350	33

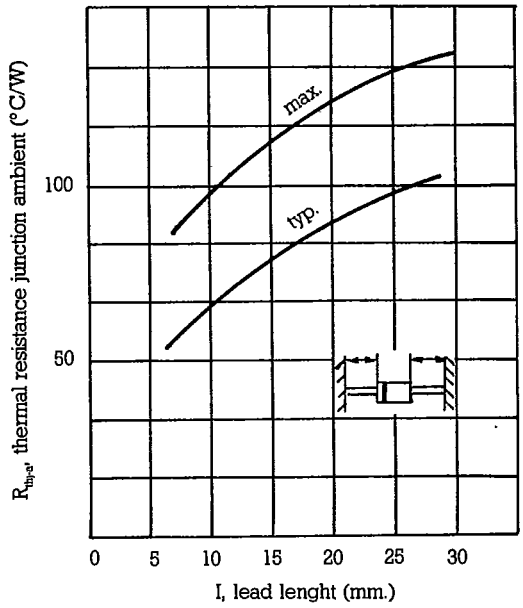
FAGOR

T-11-15

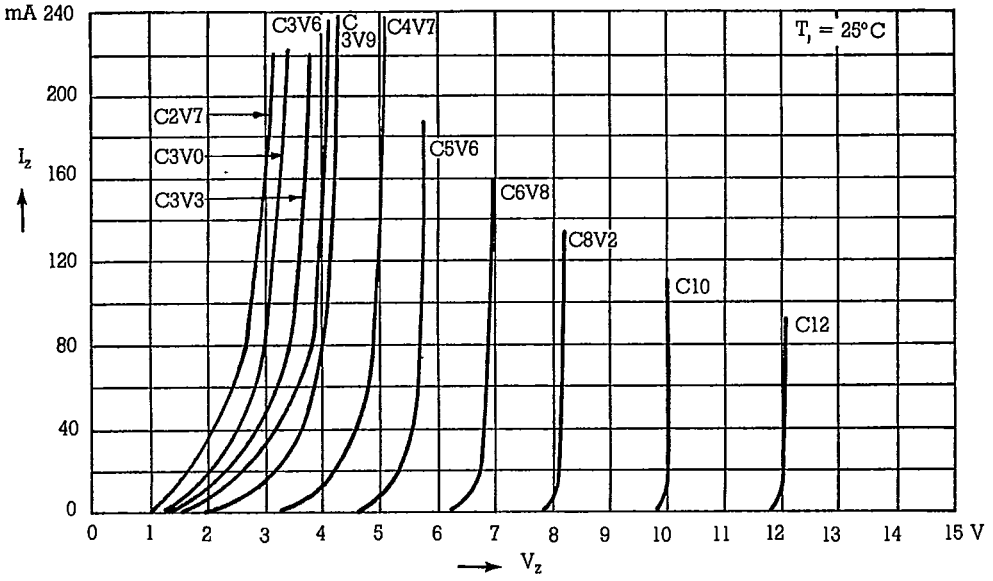
BZX85

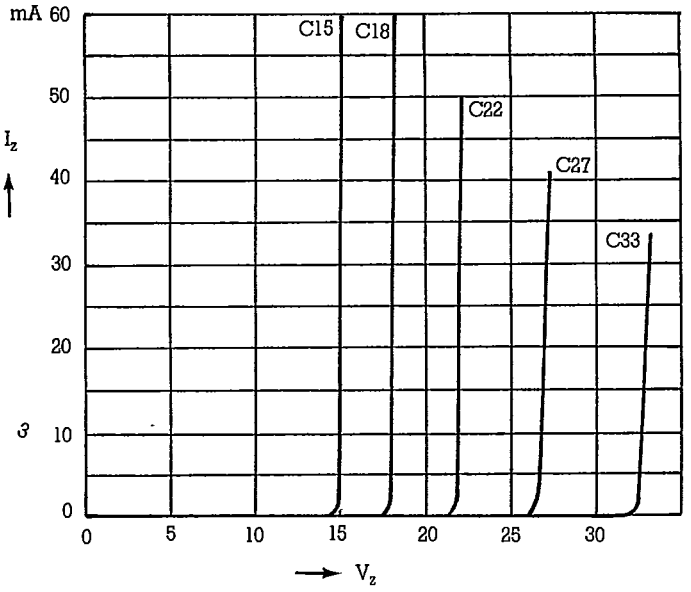
Characteristic Curves





Breakdown characteristics at T_j = constant (pulsed)

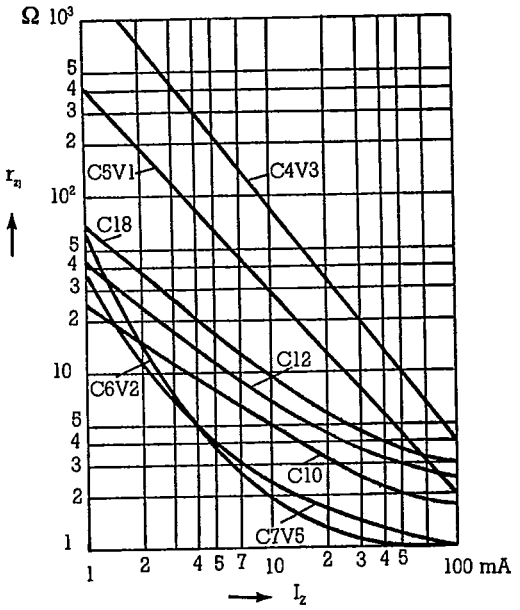




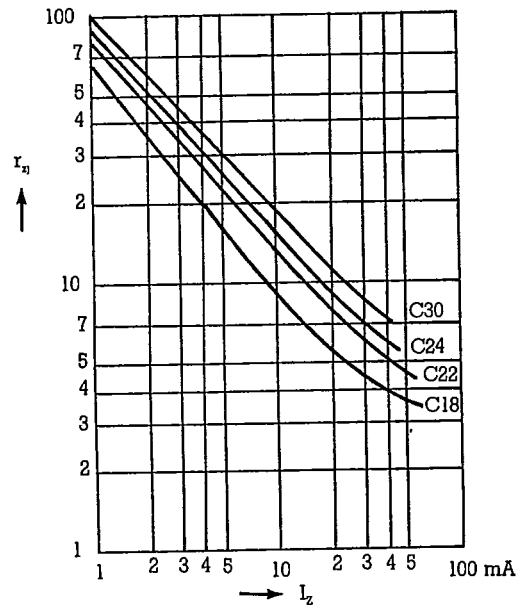
FAGOR

T-11-15

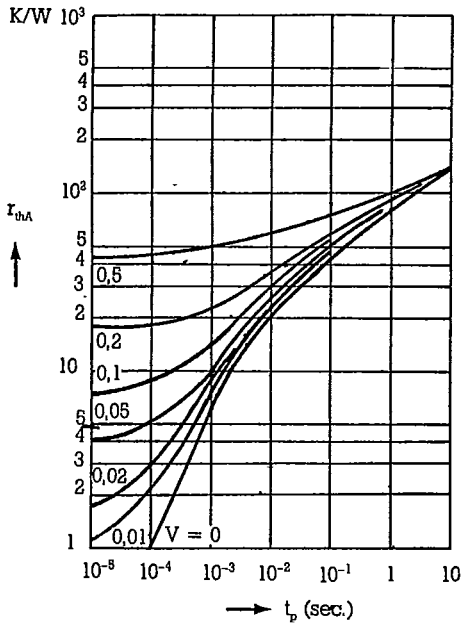
BZX85



Dynamic resistance versus Zener current.



Dynamic resistance versus Zener current.



Pulse thermal resistance versus pulse duration. Valid provided that leads are kept at ambient temperature at a distance of 10 mm. from case.