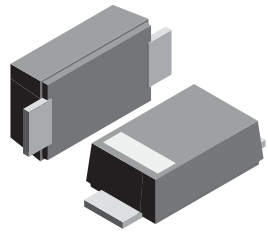
BZX85C2V4AF - BZX85C200AF

SURFACE MOUNT SILICON ZENER DIODES

VOLTAGE RANGE: 2.4 - 200V
POWER: 1.3Watts



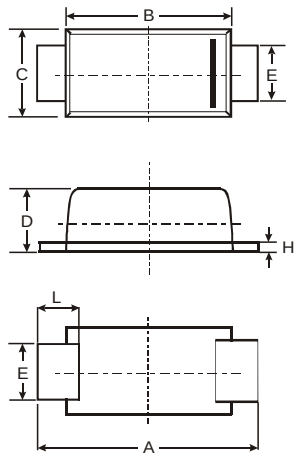
Features

- Complete Voltage Range 2.4 to 200 Volts
- High peak reverse power dissipation
- High reliability
- Low leakage current

Mechanical Data

- Case: SMAF,Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity:Color band denotes cathode end
- Mounting Position:Any
- Weight:0.0018 ounce, 0.064 grams

RoHS COMPLIANT



SMAF			
Dim	Min	Max	Typ
A	4.75	4.85	4.80
B	3.68	3.72	3.70
C	2.57	2.63	2.60
D	0.097	1.03	1.00
E	1.38	1.42	1.40
H	0.13	0.17	0.15
L	0.63	0.67	0.65
All Dimensions in mm			

Maximum Ratings T_A = 25°C unless otherwise specified

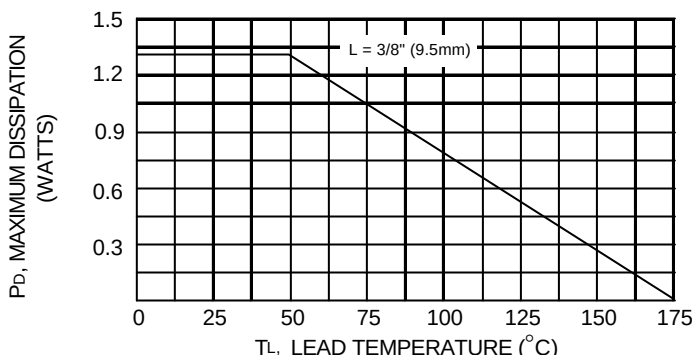
Rating	Symbol	Value	Unit
DC Power Dissipation at T_L = 50 °C (Note1)	P_D	1.3	Watts
Maximum Forward Voltage at I_F = 200 mA	V_F	1.0	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R\theta JA$	130	K / W
Junction Temperature Range	T_J	- 55 to + 175	°C
Storage Temperature Range	Ts	- 55 to + 175	°C

Note :

(1) T_L = Lead temperature at 3/8 " (9.5mm) from body

(2) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.

Fig. 1 POWER TEMPERATURE DERATING CURVE



ELECTRICAL CHARACTERISTICS

Rating at = 25 °C ambient temperature unless otherwise specified

TYPE	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	V_Z @ I_{ZT}	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R @ V_R		I_{ZM}
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
BZX85C2V4AF	2.4	80	20	400	1.0	150	1.0	410
BZX85C2V7AF	2.7	80	20	400	1.0	150	1.0	370
BZX85C3V0AF	3.0	80	20	400	1.0	100	1.0	340
BZX85C3V3AF	3.3	80	20	400	1.0	40	1.0	320
BZX85C3V6AF	3.6	70	20	500	1.0	20	1.0	290
BZX85C3V9AF	3.9	60	15	500	1.0	10	1.0	280
BZX85C4V3AF	4.3	50	13	500	1.0	3.0	1.0	250
BZX85C4V7AF	4.7	45	13	500	1.0	3.0	1.0	215
BZX85C5V1AF	5.1	45	10	500	1.0	1.0	1.5	200
BZX85C5V6AF	5.6	45	7.0	400	1.0	1.0	2.0	190
BZX85C6V2AF	6.2	35	4.0	300	1.0	1.0	3.0	170
BZX85C6V8AF	6.8	35	3.5	300	1.0	50	4.0	155
BZX85C7V5AF	7.5	35	3.0	200	0.5	50	4.5	140
BZX85C8V2AF	8.2	25	5.0	200	0.5	50	6.2	130
BZX85C9V1AF	9.1	25	5.0	200	0.5	50	6.8	120
BZX85C10AF	10	25	7.0	200	0.5	50	7.5	105
BZX85C11AF	11	20	8.0	300	0.5	50	8.2	97
BZX85C12AF	12	20	9.0	350	0.5	0.5	9.1	88
BZX85C13AF	13	20	10	400	0.5	0.5	10	79
BZX85C15AF	15	15	15	500	0.5	0.5	11	71
BZX85C16AF	16	15	15	500	0.5	0.5	12	66
BZX85C18AF	18	15	20	500	0.5	0.5	13	62
BZX85C20AF	20	10	24	600	0.5	0.5	15	56
BZX85C22AF	22	10	25	600	0.5	0.5	16	52
BZX85C24AF	24	10	25	600	0.5	0.5	18	47
BZX85C27AF	27	8.0	30	750	0.25	0.5	20	41
BZX85C30AF	30	8.0	30	1000	0.25	0.5	22	36
BZX85C33AF	33	8.0	35	1000	0.25	0.5	24	33
BZX85C36AF	36	8.0	40	1000	0.25	0.5	27	30
BZX85C39AF	39	6.0	50	1000	0.25	0.5	30	28
BZX85C43AF	43	6.0	50	1000	0.25	0.5	33	26
BZX85C47AF	47	4.0	90	1500	0.25	0.5	36	23
BZX85C51AF	51	4.0	115	1500	0.25	0.5	39	21
BZX85C56AF	56	4.0	120	2000	0.25	0.5	43	19
BZX85C62AF	62	4.0	125	2000	0.25	0.5	47	16
BZX85C68AF	68	4.0	130	2000	0.25	0.5	51	15
BZX85C75AF	75	4.0	135	2000	0.25	0.5	56	14
BZX85C82AF	82	2.7	200	3000	0.25	0.5	62	12
BZX85C91AF	91	2.7	250	3000	0.25	0.5	68	10
BZX85C100AF	100	2.7	350	3000	0.25	0.5	75	9.4
BZX85C110AF	110	2.7	450	4000	0.25	0.5	82	8.6
BZX85C120AF	120	2.0	550	4500	0.25	0.5	91	7.8
BZX85C130AF	130	2.0	700	5000	0.25	0.5	100	7.0
BZX85C150AF	150	2.0	1000	6000	0.25	0.5	110	6.4
BZX85C160AF	160	1.5	1100	6500	0.25	0.5	120	5.8
BZX85C180AF	180	1.5	1200	7000	0.25	0.5	130	5.2
BZX85C200AF	200	1.5	1500	8000	0.25	0.5	150	4.7

Note :

(1) The type number listed have a standard tolerance on the nominal zener voltage of ± 5.0%.

(2) " BZX " will be omitted in marking on the diode