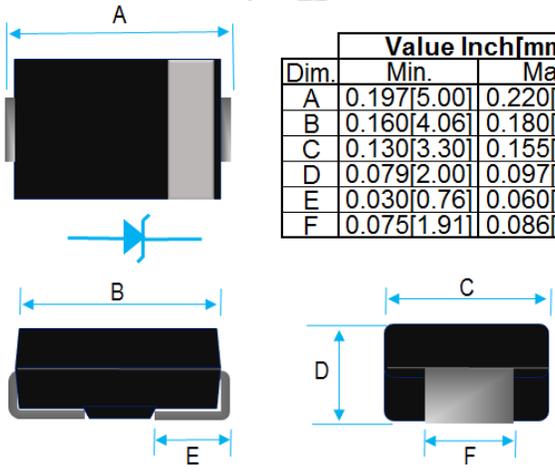


2W SURFACE MOUNT ZENER DIODES, 6.8V – 200V



Dim.	Value Inch[mm]	
	Min.	Max.
A	0.197[5.00]	0.220[5.59]
B	0.160[4.06]	0.180[4.57]
C	0.130[3.30]	0.155[3.94]
D	0.079[2.00]	0.097[2.47]
E	0.030[0.76]	0.060[1.52]
F	0.075[1.91]	0.086[2.18]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION 94V-0
2. GLASS PASSIVATED CHIP CONSTRUCTION
3. WIDE ZENER VOLTAGE RANGE FROM 6.8V TO 200V
4. LOW INDUCTANCE AND ZENER IMPEDANCE
5. POLARITY: INDICATED BY CATHODE BAND
6. MOLDED PLASTIC CASE DO-214AA (SMB)
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. LEADS: SOLDERABILITY PER MIL-STD-750 METHOD 2026
9. WEIGHT: 0.09 GRAMS
10. RoHS COMPLIANT. ADD SUFFIX "-H" FOR HALOGEN FREE PART. i.e. ZGFM206V8B-H.

ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

PARAMETER	CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNIT
FORWARD VOLTAGE	$I_F = 200 \text{ mA}$	V_F			1.20	V
POWER DISSIPATION	$T_L = 75^\circ\text{C}$	P_D			2.0	W
OPERATING TEMPERATURE		T_J	-55		+150	$^\circ\text{C}$
STORAGE TEMPERATURE		T_{STG}	-65		+175	$^\circ\text{C}$



ZGFM206V8B THRU ZGFM20200B SPECIFICATION

Rev. A

Part No.	Marking code	Zener			Test Current	Zener Impedance			Leakage Current	
		V _Z @ I _{ZT} (Volts)				Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R	V _R
		Min.	Nom.	Max.	mA					
ZGFM206V8B	2Z6V8	6.46	6.8	7.14	73.5	2.0	700	1.00	5.0	4.0
ZGFM207V5B	2Z7V5	7.13	7.5	7.88	66.5	2.0	700	0.50	5.0	5.0
ZGFM208V2B	2Z8V2	7.79	8.2	8.61	61	2.0	700	0.50	5.0	6.0
ZGFM208V7B	2Z8V7	8.27	8.7	9.14	58	2.0	700	0.50	4.0	6.6
ZGFM209V1B	2Z9V1	8.65	9.1	9.56	55	3.0	700	0.50	3.0	7.0
ZGFM2010B	2Z10	9.50	10	10.50	50	4.0	700	0.50	3.0	7.6
ZGFM2011B	2Z11	10.45	11	11.55	45.5	4.0	700	0.25	1.0	8.4
ZGFM2012B	2Z12	11.40	12	12.60	41.5	4.5	700	0.25	1.0	9.1
ZGFM2013B	2Z13	12.35	13	13.65	38.5	5.0	700	0.25	0.5	9.9
ZGFM2015B	2Z15	14.25	15	15.75	33.4	7.0	700	0.25	0.5	11.
ZGFM2016B	2Z16	15.20	16	16.80	31.2	8.0	700	0.25	0.5	12.2
ZGFM2018B	2Z18	17.10	18	18.90	27.8	10.0	750	0.25	0.5	13.7
ZGFM2020B	2Z20	19.00	20	21.00	25.0	11.0	750	0.25	0.5	15.2
ZGFM2022B	2Z22	20.90	22	23.10	22.8	12.0	750	0.25	0.5	16.7
ZGFM2024B	2Z24	22.80	24	25.20	20.8	13.0	750	0.25	0.5	18.2
ZGFM2027B	2Z27	25.65	27	28.35	18.5	18.0	750	0.25	0.5	20.6
ZGFM2030B	2Z30	28.50	30	31.50	16.6	20.0	1000	0.25	0.5	22.8
ZGFM2033B	2Z33	31.35	33	34.65	15.1	23.0	1000	0.25	0.5	25.4
ZGFM2036B	2Z36	34.20	36	37.80	13.9	25.0	1000	0.25	0.5	27.4
ZGFM2039B	2Z39	37.05	39	40.95	12.8	30.0	1500	0.25	0.5	29.7
ZGFM2043B	2Z43	40.85	43	45.15	11.6	35.0	1500	0.25	0.5	32.7
ZGFM2047B	2Z47	44.65	47	49.35	10.6	40.0	1500	0.25	0.5	35.8
ZGFM2051B	2Z51	48.45	51	53.55	9.8	48.0	1500	0.25	0.5	38.8
ZGFM2056B	2Z56	53.20	56	58.80	9.0	55.0	2000	0.25	0.5	42.6
ZGFM2062B	2Z62	58.90	62	65.10	8.1	60.0	2000	0.25	0.5	47.1
ZGFM2068B	2Z68	64.60	68	71.40	7.4	75.0	2000	0.25	0.5	51.7
ZGFM2075B	2Z75	71.25	75	78.75	6.7	90.0	2000	0.25	0.5	56.0
ZGFM2082B	2Z82	77.90	82	86.10	6.1	100	3000	0.25	0.5	62.2
ZGFM2091B	2Z91	86.45	91	95.55	5.5	125	3000	0.25	0.5	69.2
ZGFM20100B	2Z100	95.00	100	105.0	5.0	175	3000	0.25	0.5	76.0
ZGFM20110B	2Z110	104.50	110	115.5	4.5	250	4000	0.25	0.5	83.6
ZGFM20120B	2Z120	114.00	120	126.0	4.2	325	4500	0.25	0.5	91.2
ZGFM20130B	2Z130	123.50	130	136.5	3.8	400	5000	0.25	0.5	98.8
ZGFM20150B	2Z150	142.50	150	157.5	3.3	575	6000	0.25	0.5	114.0
ZGFM20160B	2Z160	152.00	160	168.0	3.1	650	6500	0.25	0.5	121.6
ZGFM20180B	2Z180	171.00	180	189.0	2.8	725	7000	0.25	0.5	136.8
ZGFM20200B	2Z200	190.00	200	210.0	2.5	900	8000	0.25	0.5	152.0

Note : Suffix B denotes 5% tolerance of Zener voltage



RATINGS AND CHARACTERISTIC CURVES

FIG. 1 Typical Thermal Response L

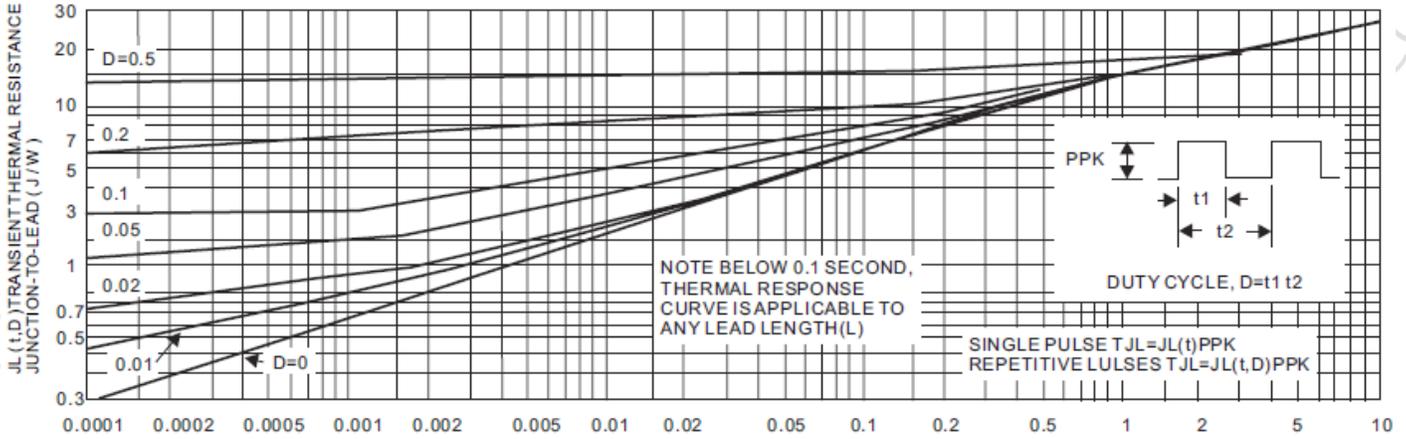


Fig. 2 Maximum Surge Power

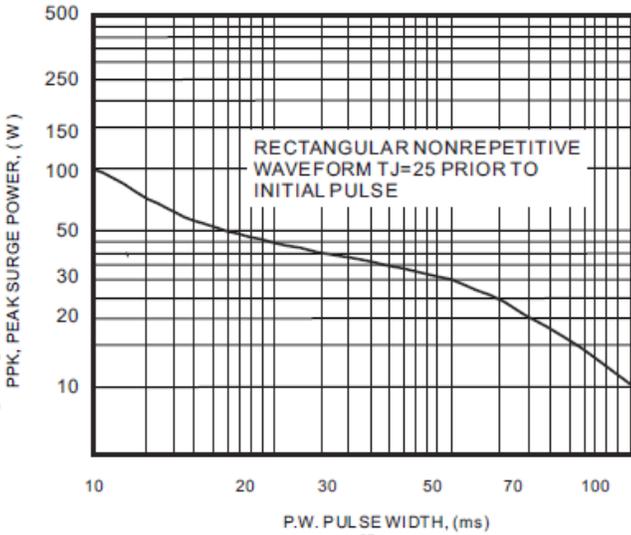


Fig. 3 Maximum Surge Power

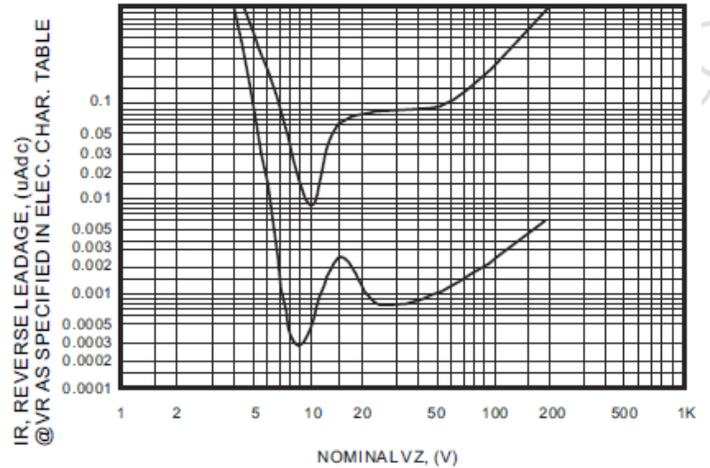


FIG. 4 Units To 200 Volts

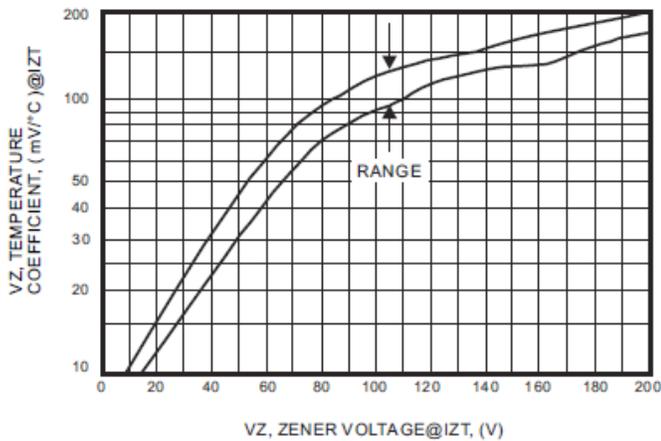


Fig 5. Units To 12 Volts

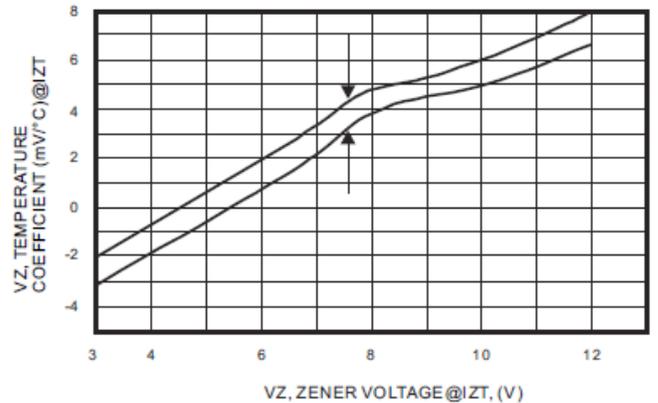




FIG. 6 VZ = 3.9 Thru 10 Volts

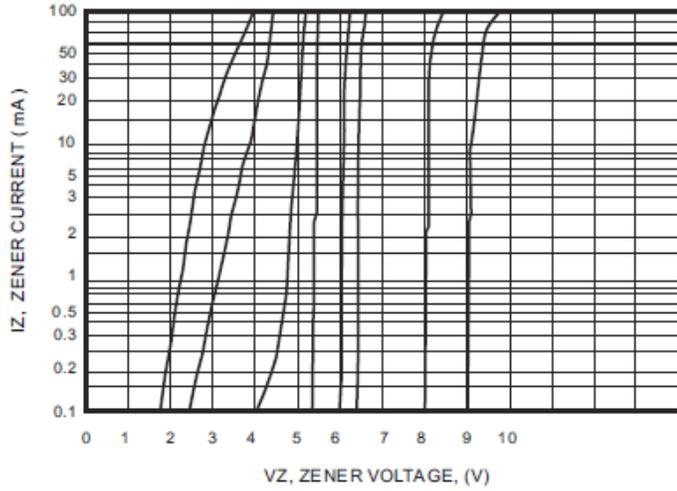


FIG. 7 VZ = 12 Thru 82 Volts

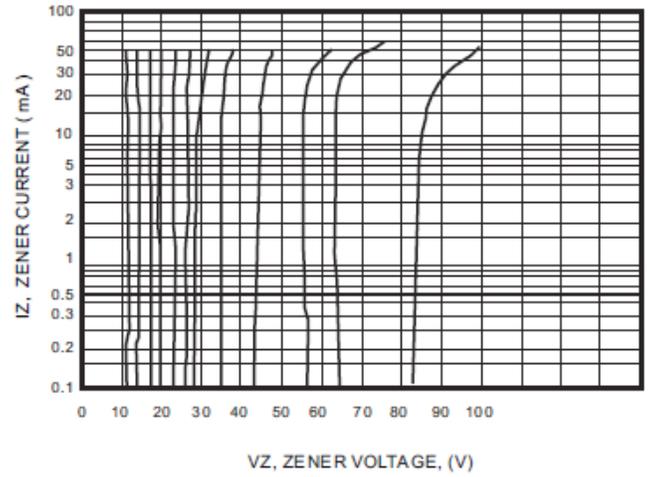


Fig. 8 VZ = 100 Thru 200 Volts

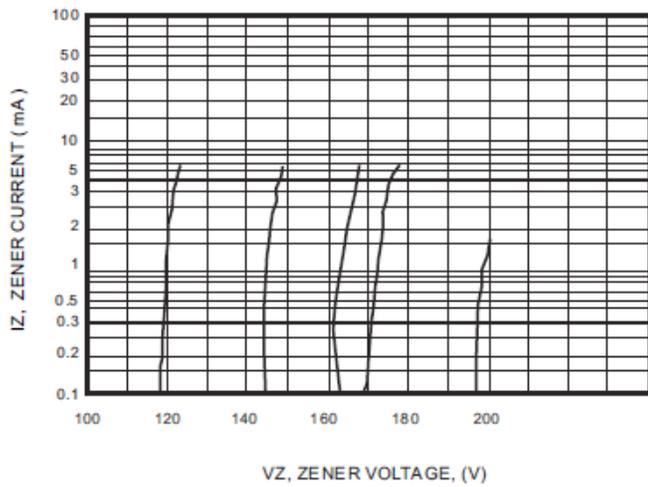


Fig. 9 Typical Thermal Resistance

