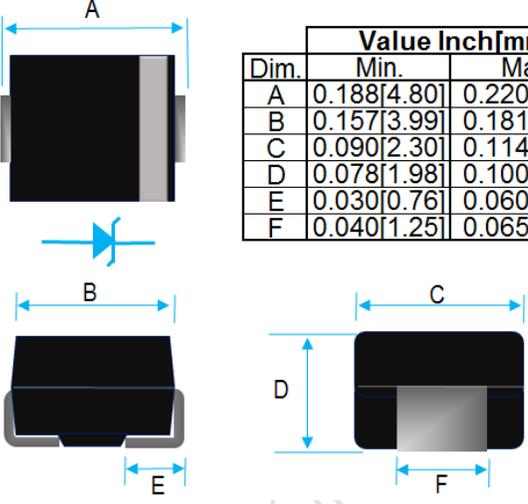


1.5W SURFACE MOUNT ZENER DIODES, 6.8V – 200V



Dim.	Value Inch[mm]	
	Min.	Max.
A	0.188[4.80]	0.220[5.60]
B	0.157[3.99]	0.181[4.60]
C	0.090[2.30]	0.114[2.90]
D	0.078[1.98]	0.100[2.60]
E	0.030[0.76]	0.060[1.52]
F	0.040[1.25]	0.065[1.65]

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-214AC (SMA)
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. LEADS: SOLDERABILITY PER MIL-STD-750 METHOD 2026
9. WEIGHT: 0.05 GRAMS
10. RoHS COMPLIANT. ADD SUFFIX "-H" FOR HALOGEN FREE PART. i.e. ZGFM5921B-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			1.5	V
POWER DISSIPATION	$T_L = 75^\circ\text{C}$	P_D			1.5	W
OPERATING TEMPERATURE		T_J	-55		+150	$^\circ\text{C}$
STORAGE TEMPERATURE		T_{STG}	-65		+175	$^\circ\text{C}$



ZGFM5921B THRU ZGFM5956B SPECIFICATION Rev. A

Part No.	Marking code	Zener			Test Current	Zener Impedance			Leakage Current	
		V _Z @ I _{ZT} (Volts)				I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R
		Min.	Nom.	Max.	mA		(Ω)Max	(Ω)Max	mA	(uA)Max
ZGFM5921B	5921B	6.46	6.8	7.14	55.1	2.5	200	1.00	5	5.2
ZGFM5922B	5922B	7.13	7.5	7.88	50.0	3.0	400	0.50	5	6.0
ZGFM5923B	5923B	7.79	8.2	8.61	45.7	3.5	400	0.50	5	6.5
ZGFM5924B	5924B	8.65	9.1	9.56	41.2	4.0	500	0.50	5	7.0
ZGFM5925B	5925B	9.50	10	10.50	37.5	4.5	500	0.25	5	8.0
ZGFM5926B	5926B	10.45	11	11.55	34.1	5.5	550	0.25	1	8.4
ZGFM5927B	5927B	11.40	12	12.60	31.2	6.5	550	0.25	1	9.1
ZGFM5928B	5928B	12.35	13	13.65	28.8	7	550	0.25	1	9.9
ZGFM5929B	5929B	14.25	15	15.75	25.0	9	600	0.25	1	11.4
ZGFM5930B	5930B	15.20	16	16.80	23.4	10	600	0.25	1	12.2
ZGFM5931B	5931B	17.10	18	18.90	20.8	12	650	0.25	1	13.7
ZGFM5932B	5932B	19.00	20	21.00	18.7	14	650	0.25	1	15.2
ZGFM5933B	5933B	20.90	22	23.10	17.0	18	650	0.25	1	16.7
ZGFM5934B	5934B	22.80	24	25.20	15.6	19	700	0.25	1	18.2
ZGFM5935B	5935B	25.65	27	28.35	13.9	23	700	0.25	1	20.6
ZGFM5936B	5936B	28.50	30	31.50	12.5	26	750	0.25	1	22.8
ZGFM5937B	5937B	31.35	33	34.65	11.4	33	800	0.25	1	25.1
ZGFM5938B	5938B	34.20	36	37.80	10.4	38	850	0.25	1	27.4
ZGFM5939B	5939B	37.05	39	40.95	9.6	45	900	0.25	1	29.7
ZGFM5940B	5940B	40.85	43	45.15	8.7	53	950	0.25	1	32.7
ZGFM5941B	5941B	44.65	47	49.35	8.0	67	1000	0.25	1	35.8
ZGFM5942B	5942B	48.45	51	53.55	7.3	70	1100	0.25	1	38.8
ZGFM5943B	5943B	53.20	56	58.80	6.7	86	1300	0.25	1	42.6
ZGFM5944B	5944B	58.90	62	65.10	6.0	100	1500	0.25	1	47.1
ZGFM5945B	5945B	64.60	68	71.40	5.5	120	1700	0.25	1	51.7
ZGFM5946B	5946B	71.25	75	78.75	5.0	140	2000	0.25	1	56.0
ZGFM5947B	5947B	77.90	82	86.10	4.6	160	2500	0.25	1	62.2
ZGFM5948B	5948B	86.45	91	95.55	4.1	200	3000	0.25	1	69.2
ZGFM5949B	5949B	95.00	100	105.0	3.7	250	3100	0.25	1	76.0
ZGFM5950B	5950B	104.5	110	115.5	3.4	300	4000	0.25	1	83.6
ZGFM5951B	5951B	114.0	120	126.0	3.1	380	4500	0.25	1	91.2
ZGFM5952B	5952B	123.5	130	136.5	2.9	450	5000	0.25	1	98.8
ZGFM5953B	5953B	142.5	150	157.5	2.5	600	6000	0.25	1	114.0
ZGFM5954B	5954B	152.0	160	168.0	2.3	700	6500	0.25	1	121.6
ZGFM5955B	5955B	171.0	180	189.0	2.1	900	7000	0.25	1	136.8
ZGFM5956B	5956B	190.0	200	210.0	1.9	1200	8000	0.25	1	152.0

Note : Suffix B denotes 5% tolerance of Zener voltage



RATINGS AND CHARACTERISTIC CURVES

FIG. 1 STEADY STATE POWER DERATING

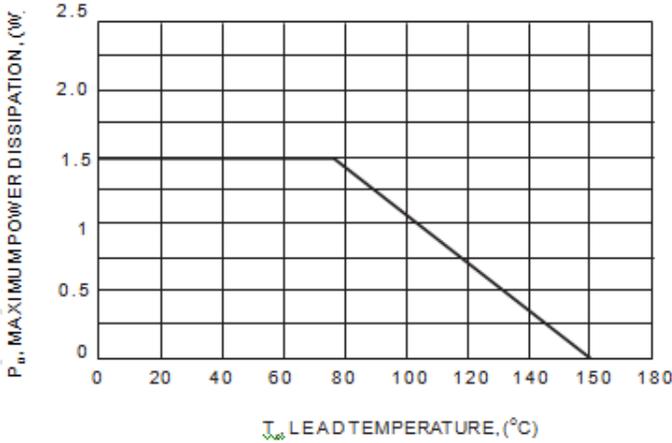


FIG. 2 ZENER VOLTAGE TO 12 VOLTS

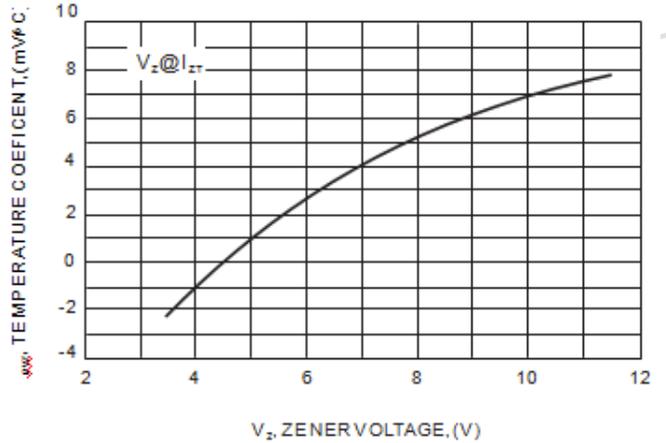


FIG. 3 ZENER VOLTAGE 12 TO 68 VOLTAGE

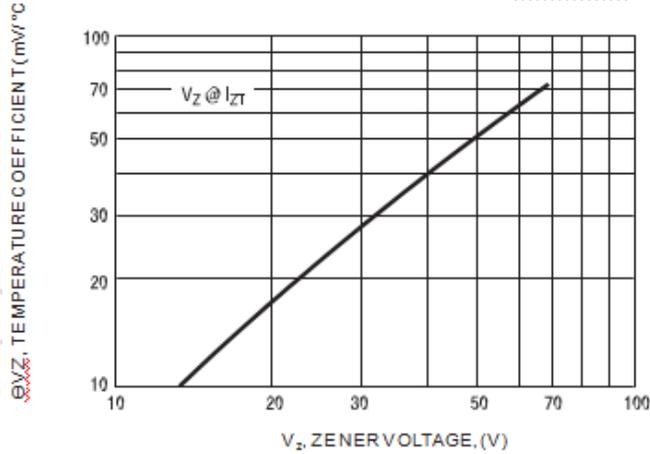


FIG. 4 EFFECT OF ZENER CURRENT

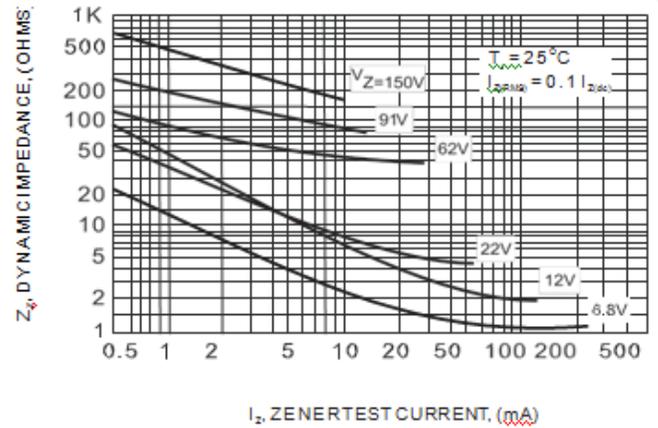


FIG. 5 EFFECT OF ZENER VOLTAGE

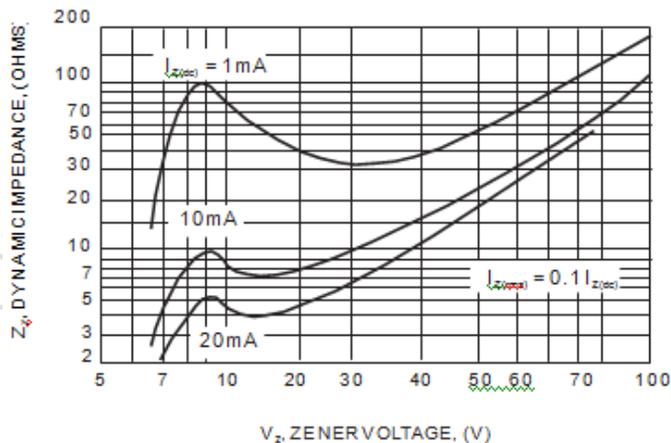


FIG. 6 MAXIMUM SURGE POWER

