

Z1SMA6V8 - Z1SMA120

SURFACE MOUNT ZENER DIODES

V_Z : 6.8 - 120 Volts

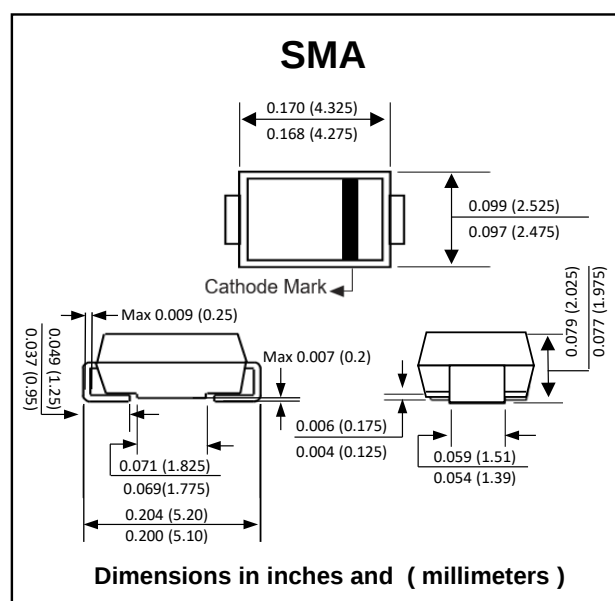
P_D : 1 Watt

FEATURES :

- * Complete voltage range 3.3 to 120 volts
- * High peak reverse power dissipation
- * High reliability
- * Low leakage current
- * Pb / RoHS Free

MECHANICAL DATA

- * Case : SMA (DO-214AC) Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead formed for Surface mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.064 gram



MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
Power Dissipation	P_D	1.0	W
Maximum Forward Voltage at $I_F = 200$ mA	V_F	1.2	V
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	- 55 to + 150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Type	Device Marking	Zener Voltage ¹⁾			Max. Dynamic Impedance ²⁾		Max. Reverse Current	
		Min. (V)	Max. (V)	I _{ZT} (mA)	Z _{ZT} (Ω)	I _{ZT} (mA)	I _R (μA)	V _R (V)
Z1SMA6V8	Z6V8	6.4	7.2	5	25	5	20	3.5
Z1SMA7V5	Z7V5	7.0	7.9	5	25	5	20	4.0
Z1SMA8V2	Z8V2	7.7	8.7	5	25	5	20	5.0
Z1SMA9V1	Z9V1	8.5	9.6	5	25	5	20	6.0
Z1SMA10	Z10	9.4	10.6	5	20	5	10	7.0
Z1SMA11	Z11	10.4	11.6	5	20	5	10	8.0
Z1SMA12	Z12	11.4	12.6	5	25	5	10	9.0
Z1SMA13	Z13	12.4	14.1	5	30	5	10	10
Z1SMA15	Z15	13.8	15.6	5	30	5	10	11
Z1SMA16	Z16	15.3	17.1	5	40	5	10	12
Z1SMA18	Z18	16.8	19.1	5	45	5	10	13
Z1SMA20	Z20	18.8	21.2	5	55	5	10	15
Z1SMA22	Z22	20.8	23.3	2	55	2	10	17
Z1SMA24	Z24	22.8	25.6	2	70	2	10	19
Z1SMA27	Z27	25.1	28.9	2	80	2	10	21
Z1SMA30	Z30	28	32	2	80	2	10	23
Z1SMA33	Z33	31	35	2	80	2	10	25
Z1SMA36	Z36	34	38	2	90	2	10	27
Z1SMA39	Z39	37	41	2	130	2	10	30
Z1SMA43	Z43	40	45	2	150	2	5	33
Z1SMA47	Z47	44	49	2	170	2	5	36
Z1SMA51	Z51	48	54	2	220	2	5	39
Z1SMA56	Z56	53	60	2	220	2	5	43
Z1SMA62	Z62	58	66	2	220	2	5	47
Z1SMA68	Z68	64	72	2	230	2	5	52
Z1SMA75	Z75	70	79	2	250	2	5	57
Z1SMA82	Z82	77	87	2	270	2	5	63
Z1SMA91	Z91	85	96	2	340	2	5	69
Z1SMA100	Z100	94	106	2	430	2	5	76
Z1SMA110	Z110	104	116	2	530	2	5	84
Z1SMA120	Z120	114	126	2	620	2	5	91

Notes :

(1) Test with pulse (40 ms).

(2) Z_{ZT} is measured at given an very small A.C. current signal.

(3) " 1SMA " will be omitted in marking on the diode.