

3W Surface Mount Zener Diodes

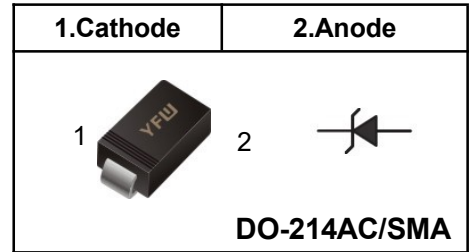
FEATURES

- † Glass passivated chip
- † Built-in strain relief
- † Low inductance
- † High peak reverse power dissipation
- † Low reverse leakage
- † For use in stabilizing and clipping with high power rating
- † RoHS compliant

MECHANICAL DATA

- † Case: SMA Molded plastic
- † Lead: Solderable per MIL-STD-750, method 2026
- † Epoxy: UL 94V-0 rate flame retardant
- † Polarity: Color band denotes cathode end except Bipolar
- † Mounting position: Any

Pinning

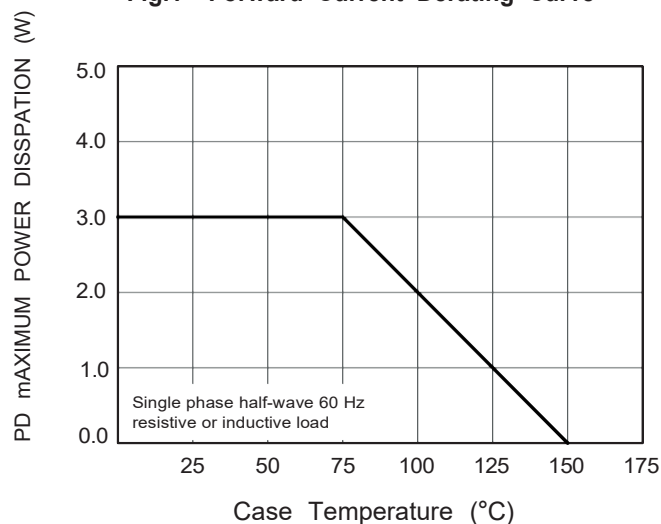


Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Power Dissipation at T _c =75°C	P_b	3.0	W
Forward Voltage at I _F = 200 mA	V_F	1.5	V
Junction Temperature Range	T_J	55 ~ +175	°C
Storage Temperature Range	T_s	-55 ~ +175	°C

Fig.1 Forward Current Derating Curve



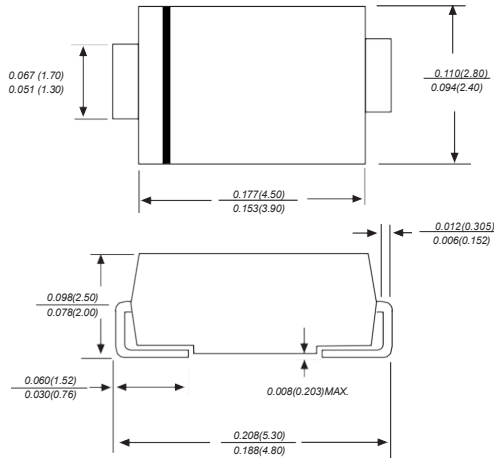
Characteristics at Ta = 25°C

(TL = 30°C unless otherwise noted, VF = 1.5 V Max. @ IF = 200 mA(DC) for all types)

Type	Marking	Nominal Zener Voltage ⁽³⁾				Zener Impedance ⁽⁴⁾			Leakage Current		Maximum DC Zener Current
		V _Z			I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}		I _R @ V _R		
		Min (V)	Nom (V) ⁽²⁾	Max (V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	I _{ZM} (mA)(DC)
3SMA5913B	H13B	3.13	3.3	3.47	227.3	10	500	1	100	1	817
3SMA5914B	H14B	3.42	3.6	3.78	208.3	9	500	1	100	1	749
3SMA5915B	H15B	3.70	3.9	4.10	192.0	4.5	500	1	100	1	691
3SMA5916B	H16B	4.08	4.3	4.52	174.0	4.5	500	1	50	1	627
3SMA5917B	H17B	4.46	4.7	4.94	160.0	4	500	1	50	1	573
3SMA5918B	H18B	4.84	5.1	5.36	147.0	3.5	550	1	10	1	528
3SMA5919B	H19B	5.32	5.6	5.88	134.0	2.5	600	1	10	2	481
3SMA5920B	H20B	5.89	6.2	6.51	121.0	1.5	700	1	10	3	435
3SMA5921B	H21B	6.46	6.8	7.14	110.0	2	700	1	10	4	393
3SMA5922B	H22B	7.12	7.5	7.88	100	2	700	0.5	10	5	360
3SMA5923B	H23B	7.79	8.2	8.61	91.0	2.3	700	0.5	10	6	330
3SMA5924B	H24B	8.64	9.1	9.56	82.0	2.5	700	0.5	10	7	297
3SMA5925B	H25B	9.5	10	10.5	75.0	3.5	700	0.25	10	7.6	270
3SMA5926B	H26B	10.45	11	11.55	68.0	4.0	700	0.25	1	8.4	246
3SMA5927B	H27B	11.4	12	12.6	63.0	4.5	700	0.25	1	9.1	225
3SMA5928B	H28B	12.35	13	13.65	58.0	4.5	700	0.25	1	9.9	208
3SMA5929B	H29B	14.25	15	15.75	50.0	5.5	700	0.25	1	11.4	180
3SMA5930B	H30B	15.2	16	16.8	47.0	5.5	700	0.25	1	12.2	169
3SMA5931B	H31B	17.1	18	18.9	42.0	6	750	0.25	1	13.7	150
3SMA5932B	H32B	19	20	21	37.0	7	750	0.25	1	15.2	135
3SMA5933B	H33B	20.9	22	23.1	34.0	8	750	0.25	1	16.7	123
3SMA5934B	H34B	22.8	24	25.2	31.0	9	750	0.25	1	18.2	112
3SMA5935B	H35B	25.65	27	28.35	28.0	10	750	0.25	1	20.6	100
3SMA5936B	H36B	28.5	30	31.5	25.0	16	1000	0.25	1	22.5	90
3SMA5937B	H37B	31.35	33	34.65	23.0	20	1000	0.25	1	25.1	82
3SMA5938B	H38B	34.2	36	37.8	21.0	22	1000	0.25	1	27.4	75
3SMA5939B	H39B	37.05	39	40.95	19.0	28	1000	0.25	1	29.7	69
3SMA5940B	H40B	40.85	43	45.15	17.0	33	1500	0.25	1	32.7	63
3SMA5941B	H41B	44.65	47	49.35	16.0	38	1500	0.25	1	35.6	57
3SMA5942B	H42B	48.45	51	53.55	15.0	45	1500	0.25	1	38.8	53
3SMA5943B	H43B	53.2	56	58.8	13.0	50	2000	0.25	1	42.6	48
3SMA5944B	H44B	58.9	62	65.1	12.0	55	2000	0.25	1	47.1	44
3SMA5945B	H45B	64.6	68	71.4	11.0	70	2000	0.25	1	51.7	40
3SMA5946B	H46B	71.25	75	78.75	10.0	85	2000	0.25	1	56	36
3SMA5947B	H47B	77.9	82	86.1	9.1	95	3000	0.25	1	62.2	33
3SMA5948B	H48B	86.45	91	95.55	8.2	115	3000	0.25	1	69.2	30
3SMA5949B	H49B	95	100	105	7.5	160	3000	0.25	1	76	27
3SMA5950B	H50B	104.5	110	115.5	6.8	225	4000	0.25	1	83.6	25
3SMA5951B	H51B	114	120	126	6.3	300	4500	0.25	1	91.2	22
3SMA5952B	H52B	123.5	130	136.5	5.8	375	5000	0.25	1	98.8	21
3SMA5953B	H53B	142.5	150	157.5	5.0	550	6000	0.25	1	114	18
3SMA5954B	H54B	152	160	168	4.7	625	6500	0.25	1	121.6	17
3SMA5955B	H55B	171	180	189	4.2	700	7000	0.25	1	136.8	15
3SMA5956B	H56B	190	200	210	3.7	875	8000	0.25	1	152	13

Package Outline

DO-214AC SMA



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-214AC SMA	Tape/Reel, 11" reel	5000	EIA-481-1
	Tape/Reel, 7" reel	2000	EIA-481-1