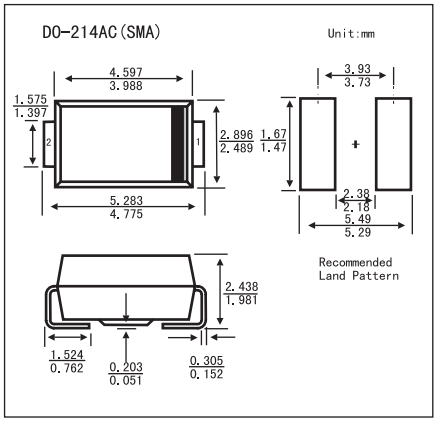
Surface Mount Zener Diodes

1SMA59-B Series



Features

- Flat Handling Surface for Accurate Placement
- Standard Zener Breakdown Voltage Range -3.3V to 68V
- Low Profile Package

Absolute Maximum Ratings (Ta = 25℃)

Parameter	Symbol	Rating	Unit
Power dissipation @ T_L = 75℃	P	1500	mW
Thermal Resistance, Junction to Lead	$R_{\theta JL}$	50	℃/W
Power dissipation @ T_A = 25℃	P	500	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	250	℃/W
Jumction temperature	T_j	150	℃
Storage temperature	T_{stg}	-65 to +150	℃

Electrical Characteristics (Ta = 25℃)

Type	Zener voltage Vz (V)				Zener Impedance			Leakage Current		I_{ZM} (mA) (dc)	Marking
	Min.	Mom.	Max.	@ I_{ZT} (mA)	Z_{ZT} @ I_{ZT} (Ω)	Z_{ZK} (Ω)	@ I_{ZK} (mA)	I_R (μA)	@ V_R (V)		
1SMA5913B	3.13	3.3	3.47	113.6	10	500	1.0	50	1.0	455	813B
1SMA5914B	3.42	3.6	3.78	104.2	9.0	500	1.0	35.5	1.0	417	814B
1SMA5915B	3.70	3.9	4.10	96.1	7.5	500	1.0	12.5	1.0	385	815B
1SMA5916B	4.08	4.3	4.52	87.2	6.0	500	1.0	2.5	1.0	349	816B
1SMA5917B	4.46	4.7	4.94	79.8	5.0	500	1.0	2.5	1.5	319	817B
1SMA5918B	4.84	5.1	5.36	73.5	4.0	350	1.0	2.5	2.0	294	818B
1SMA5919B	5.32	5.6	5.88	66.9	2.0	250	1.0	2.5	3.0	268	819B
1SMA5920B	5.89	6.2	6.51	60.5	2.0	200	1.0	2.5	4.0	242	820B
1SMA5921B	6.46	6.8	7.14	55.1	2.5	200	1.0	2.5	5.2	221	821B
1SMA5922B	7.12	7.5	7.88	50	3.0	400	0.5	2.5	6.0	200	822B

1SMA59-B Series

Type	Zener voltage Vz (V)				Zener Impedance			Leakage Current		IZM (mA) (dc)	Marking
	Min.	Mom.	Max.	@ IZT (mA)	ZZT @ IZT (Ω)	ZZK (Ω)	@ IZK (mA)	IR (μA)	@ VR (V)		
1SMA5923B	7.79	8.2	8.61	45.7	3.5	400	0.5	2.5	6.5	183	823B
1SMA5924B	8.64	9.1	9.56	41.2	4.0	500	0.5	2.5	7.0	165	824B
1SMA5925B	9.5	10	10.5	37.5	4.5	500	0.25	2.5	8.0	150	825B
1SMA5926B	10.45	11	11.55	34.1	5.5	550	0.25	0.5	8.4	136	826B
1SMA5927B	11.4	12	12.6	31.2	6.5	550	0.25	0.5	9.1	125	827B
1SMA5928B	12.35	13	13.65	28.8	7.0	550	0.25	0.5	9.9	115	828B
1SMA5929B	14.25	15	15.75	25	9.0	600	0.25	0.5	11.4	100	829B
1SMA5930B	15.2	16	16.8	23.4	10	600	0.25	0.5	12.2	94	830B
1SMA5931B	17.1	18	18.9	20.8	12	650	0.25	0.5	13.7	83	831B
1SMA5932B	19	20	21	18.7	14	650	0.25	0.5	15.2	75	832B
1SMA5933B	20.9	22	23.1	17	17.5	650	0.25	0.5	16.7	68	833B
1SMA5934B	22.8	24	25.2	15.6	19	700	0.25	0.5	18.2	63	834B
1SMA5935B	25.65	27	28.35	13.9	23	700	0.25	0.5	20.6	56	835B
1SMA5936B	28.5	30	31.5	12.5	26	750	0.25	0.5	22.8	50	836B
1SMA5937B	31.35	33	34.65	11.4	33	800	0.25	0.5	25.1	45	837B
1SMA5938B	34.2	36	37.8	10.4	38	850	0.25	0.5	27.4	42	838B
1SMA5939B	37.05	39	40.95	9.6	45	900	0.25	0.5	29.7	38	839B
1SMA5940B	40.85	43	45.15	8.7	53	950	0.25	0.5	32.7	35	840B
1SMA5941B	44.65	47	49.35	8.0	67	1000	0.25	0.5	35.8	32	841B
1SMA5942B	48.45	51	53.55	7.3	70	1100	0.25	0.5	38.8	29	842B
1SMA5943B	53.2	56	58.8	6.7	86	1300	0.25	0.5	42.6	27	843B
1SMA5944B	58.9	62	65.1	6.0	100	1500	0.25	0.5	47.1	24	844B
1SMA5945B	64.6	68	71.4	5.5	120	1700	0.25	0.5	51.7	22	845B