

Zener Diodes

SMCJ5333B - SMCJ5388B

Features

- Low profile package for surface mounting
- Zener Voltage 3.3V to 200V
- High Surge Current Capability
- RoHS compliant with Halogen-free



Mechanical Data

- Case: SMC molded plastic
- Molding compound, UL flammability classification rating 94V-0
- Polarity: Color band denotes cathode end

Maximum Ratings (@T_A = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Power dissipation at T _L =75°C	P _{tot}	5.0	W
Forward voltage @I _F = 200mA	V _F	1.2	V
Typical thermal resistance	R _{θJL}	15	°C/W
	R _{θJA}	60	
Junction temperature	T _J	-55 ~ +150	°C
Storage temperature range	T _{STG}	-55 ~ +150	°C

Zener Diodes

SMCJ5333B - SMCJ5388B

Electrical Characteristics (@T_A = 25°C unless otherwise specified)

Part Number	Device marking code	Zener voltage			Test current	Reverse current	Reverse voltage	Max. DC current
		V _Z (V)			I _{ZT}	I _{R(Max.)}	V _R	I _{ZM}
		Min	Nom	Max	mA	uA	V	mA
SMCJ5333B	5333B	2.97	3.3	3.63	380	300	1	1440
SMCJ5334B	5334B	3.51	3.9	4.29	350	150	1	1320
SMCJ5335B	5335B	3.51	3.9	4.29	320	50	1	1220
SMCJ5336B	5336B	3.87	4.3	4.73	290	10	1	1100
SMCJ5337B	5337B	4.23	4.7	5.17	260	5	1	1010
SMCJ5338B	5338B	4.59	5.1	5.61	240	1	1	930
SMCJ5339B	5339B	5.04	5.6	6.16	220	1	2	865
SMCJ5340B	5340B	5.40	6.0	6.60	200	1	3	790
SMCJ5341B	5341B	5.58	6.2	6.82	200	1	3	765
SMCJ5342B	5342B	6.12	6.8	7.48	175	10	4.9	700
SMCJ5343B	5343B	6.75	7.5	8.25	175	10	6.4	630
SMCJ5344B	5344B	7.38	8.2	9.02	150	10	6.9	580
SMCJ5345B	5345B	7.83	8.7	9.57	150	10	6.25	545
SMCJ5346B	5346B	8.19	9.1	10.01	150	7.5	6.6	520
SMCJ5347B	5347B	9.00	10	11.00	125	5	7.2	475
SMCJ5348B	5348B	9.90	11	12.10	125	5	8	430
SMCJ5349B	5349B	10.80	12	13.20	100	2	8.6	395
SMCJ5350B	5350B	11.70	13	14.30	100	1	9.4	265
SMCJ5351B	5351B	12.60	14	15.40	100	1	10.1	340
SMCJ5352B	5352B	13.50	15	16.50	75	1	10.8	315
SMCJ5353B	5353B	14.40	16	17.60	75	1	11.5	295
SMCJ5354B	5354B	15.30	17	18.70	70	0.5	12.2	280
SMCJ5355B	5355B	16.20	18	19.80	65	0.5	13	264
SMCJ5356B	5356B	17.10	19	20.90	65	0.5	13.7	250
SMCJ5357B	5357B	18.00	20	22.00	65	0.5	14.4	237
SMCJ5358B	5358B	19.80	22	24.20	50	0.5	15.8	216
SMCJ5359B	5359B	21.60	24	26.40	50	0.5	17.3	198
SMCJ5360B	5360B	22.50	25	27.50	50	0.5	18	190

Zener Diodes

SMCJ5333B - SMCJ5388B

Part Number	Device marking code	Zener voltage			Test current	Reverse current	Reverse voltage	Max. DC current
		V _Z (V)			I _{ZT}	I _{R(Max.)}	V _R	I _{ZM}
		Min	Nom	Max	mA	uA	V	mA
SMCJ5361B	5361B	24.3	27	29.7	50	0.5	19.4	176
SMCJ5362B	5362B	25.2	28	30.8	50	0.5	20.1	170
SMCJ5363B	5363B	27	30	33	40	0.5	21.6	158
SMCJ5364B	5364B	29.7	33	36.3	40	0.5	23.8	144
SMCJ5365B	5365B	32.4	36	39.6	30	0.5	25.9	132
SMCJ5366B	5366B	35.1	39	42.9	30	0.5	28.1	122
SMCJ5367B	5367B	38.7	43	47.3	30	0.5	31	110
SMCJ5368B	5368B	42.3	47	51.7	25	0.5	33.8	100
SMCJ5369B	5369B	45.9	51	56.1	25	0.5	36.7	93
SMCJ5370B	5370B	50.4	56	61.6	20	0.5	40.3	86
SMCJ5371B	5371B	54	60	66	20	0.5	43	79
SMCJ5372B	5372B	55.8	62	68.2	20	0.5	44.6	76
SMCJ5373B	5373B	61.2	68	74.8	20	0.5	49	70
SMCJ5374B	5374B	67.5	75	82.5	20	0.5	54	63
SMCJ5375B	5375B	73.8	82	90.2	15	0.5	59	58
SMCJ5376B	5376B	78.3	87	95.7	15	0.5	63	54.5
SMCJ5377B	5377B	81.9	91	100.1	15	0.5	65.5	52.5
SMCJ5378B	5378B	90	100	110	12	0.5	72	47.5
SMCJ5379B	5379B	99	110	121	12	0.5	79.4	43
SMCJ5380B	5380B	108	120	132	10	0.5	86.4	39.5
SMCJ5381B	5381B	117	130	143	10	0.5	93.6	36.6
SMCJ5382B	5382B	126	140	154	8	0.5	101	34
SMCJ5383B	5383B	135	150	165	8	0.5	108	31.5
SMCJ5384B	5384B	144	160	176	8	0.5	115	29.4
SMCJ5385B	5385B	153	170	187	8	0.5	122	28
SMCJ5386B	5386B	162	180	198	5	0.5	130	26.4
SMCJ5387B	5387B	171	190	209	5	0.5	137	25
SMCJ5388B	5388B	180	200	220	5	0.5	144	23.6

Zener Diodes

SMCJ5333B - SMCJ5388B

Ratings and Characteristic Curves (@ $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Fig.1 Steady-State Power Derating Curve

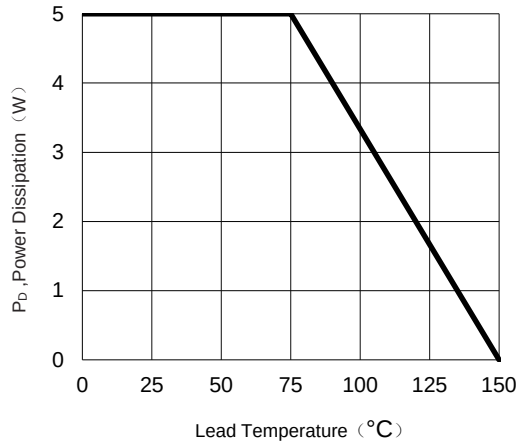


Fig.2 Typical Thermal Resistance

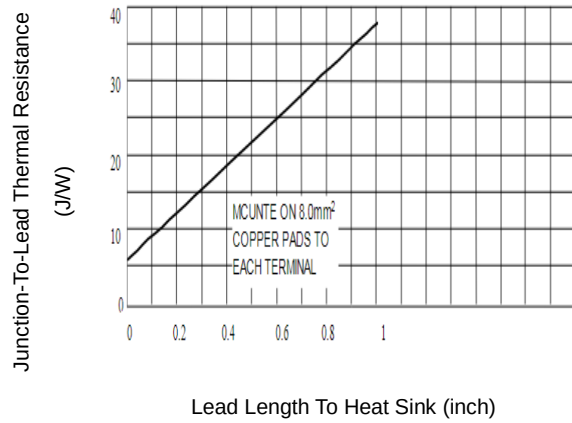
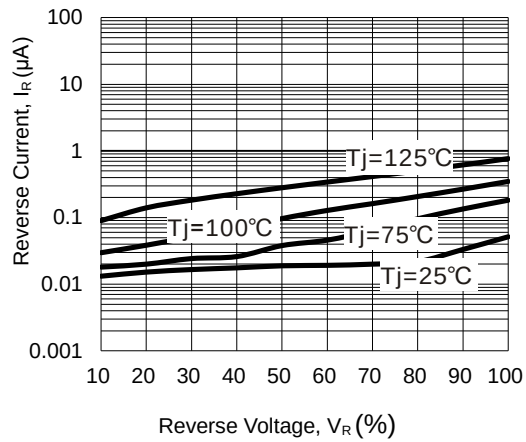


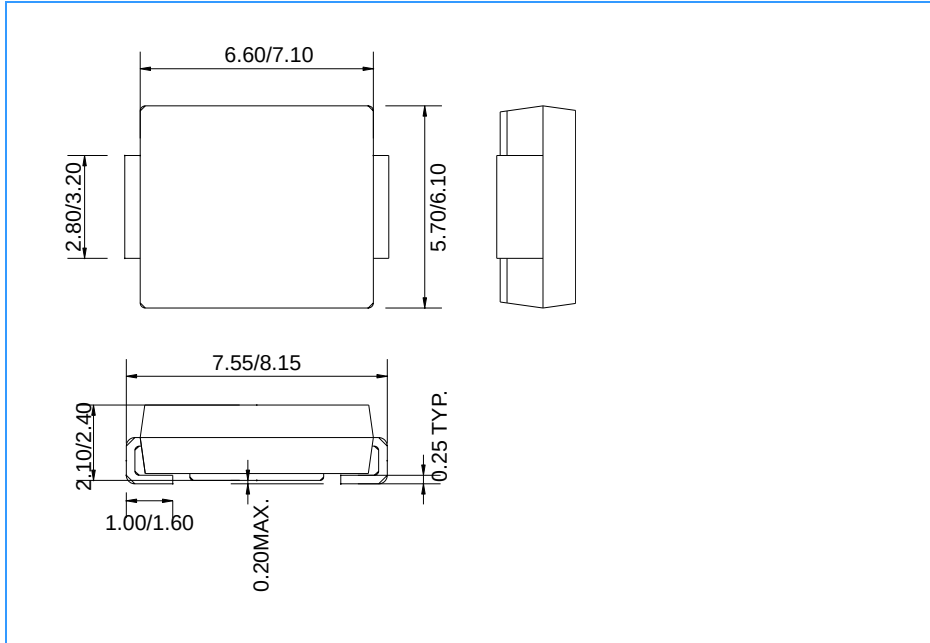
Fig.3 Typical Reverse Characteristic



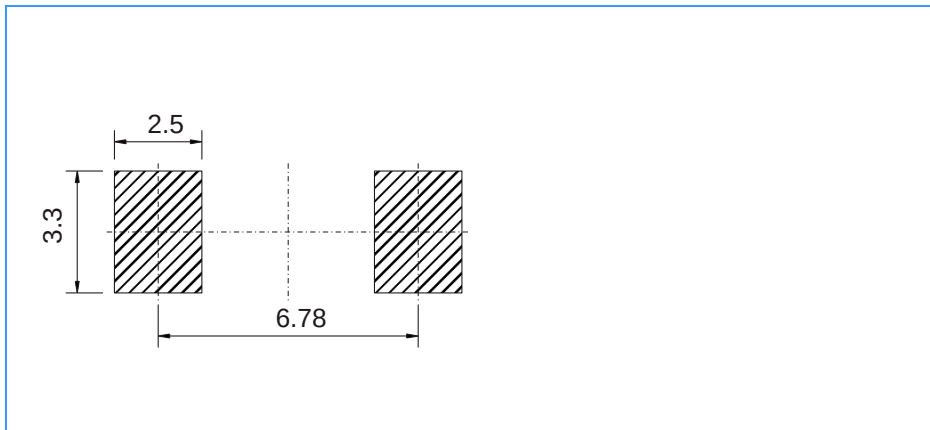
Zener Diodes

SMCJ5333B - SMCJ5388B

Package Outline Dimensions (Unit: mm)



Mounting Pad Layout (Unit: mm)



Ordering Information

Part Number	Package	Shipping Quantity
SMCJ5333B - SMCJ5388B	SMC	3000 / Tape & Reel