

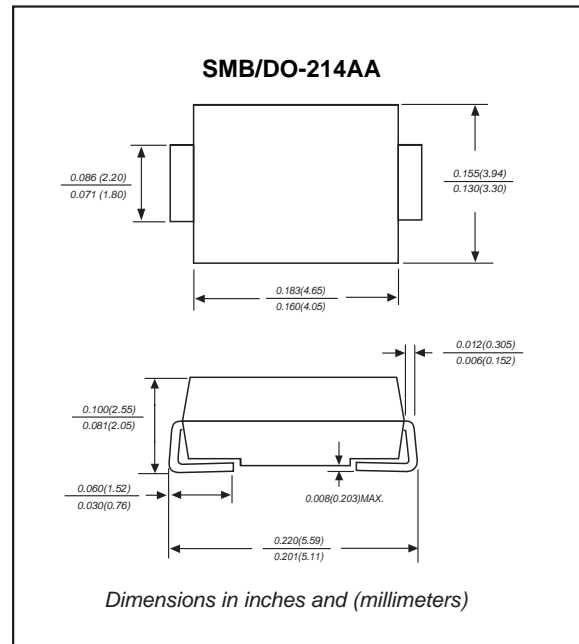
### Features

- Glass passivated chip junction.
- Low inductance.
- Low profile package.
- Built-in strain relief.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228
- Compliant to Halogen-free.
- Suffix "-Q1" for AEC-Q101

### Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AA / SMB
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any

### Package outline



### Maximum ratings (at $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage	$I_F = 200 \text{ mA}$	$V_F$			1.20	V
Power dissipation	$T_L = 50^{\circ}\text{C}$	$P_D$			5.0	W
Operating junction temperature range		$T_J$	-55		+150	$^{\circ}\text{C}$
Storage temperature range		$T_{STG}$	-65		+175	$^{\circ}\text{C}$

### Electrical characteristics (at T<sub>A</sub>=25°C unless otherwise noted)

TYPE	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	V <sub>Z</sub> @ I <sub>ZT</sub>	I <sub>ZT</sub>	Z <sub>ZT</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub> @ V <sub>R</sub>	I <sub>ZM</sub>	
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
SMBJ5333B-Q1	3.3	380	3.0	400	1.0	300	1.0	1440
SMBJ5334B-Q1	3.6	350	2.5	500	1.0	150	1.0	1320
SMBJ5335B-Q1	3.9	320	2.0	500	1.0	50	1.0	1220
SMBJ5336B-Q1	4.3	290	2.0	500	1.0	10	1.0	1100
SMBJ5337B-Q1	4.7	260	2.0	450	1.0	5.0	1.0	1010
SMBJ5338B-Q1	5.1	240	1.5	400	1.0	1.0	1.0	930
SMBJ5339B-Q1	5.6	220	1.0	400	1.0	1.0	2.0	856
SMBJ5340B-Q1	6.0	200	1.0	300	1.0	1.0	3.0	790
SMBJ5341B-Q1	6.2	200	1.0	200	1.0	1.0	4.0	765
SMBJ5342B-Q1	6.8	175	1.0	200	1.0	10	4.9	700
SMBJ5343B-Q1	7.5	175	1.0	200	1.0	10	5.4	630
SMBJ5344B-Q1	8.2	150	1.0	200	1.0	10	5.9	580
SMBJ5345B-Q1	8.7	150	1.0	200	1.0	10	6.3	545
SMBJ5346B-Q1	9.1	150	2.0	150	1.0	7.5	6.6	520
SMBJ5347B-Q1	10	125	2.0	125	1.0	5.0	7.2	475
SMBJ5348B-Q1	11	125	2.0	125	1.0	5.0	8.0	430
SMBJ5349B-Q1	12	100	2.5	125	1.0	2.0	8.6	395
SMBJ5350B-Q1	13	100	2.5	100	1.0	1.0	9.4	365
SMBJ5351B-Q1	14	100	2.5	75	1.0	1.0	10.1	340
SMBJ5352B-Q1	15	75	2.5	75	1.0	1.0	10.8	315
SMBJ5353B-Q1	16	75	2.5	75	1.0	1.0	11.5	295
SMBJ5354B-Q1	17	70	2.5	75	1.0	0.5	12.2	280
SMBJ5355B-Q1	18	65	2.5	75	1.0	0.5	13.0	265
SMBJ5356B-Q1	19	65	3.0	75	1.0	0.5	13.7	250
SMBJ5357B-Q1	20	65	3.0	75	1.0	0.5	14.4	237
SMBJ5358B-Q1	22	50	3.5	75	1.0	0.5	15.8	216
SMBJ5359B-Q1	24	50	3.5	100	1.0	0.5	17.3	198
SMBJ5360B-Q1	25	50	4.0	110	1.0	0.5	18.0	190
SMBJ5361B-Q1	27	50	5.0	120	1.0	0.5	19.4	176
SMBJ5362B-Q1	28	50	6.0	130	1.0	0.5	20.1	170
SMBJ5363B-Q1	30	40	8.0	140	1.0	0.5	21.6	158
SMBJ5364B-Q1	33	40	10	150	1.0	0.5	23.8	144
SMBJ5365B-Q1	36	30	11	160	1.0	0.5	25.9	132
SMBJ5366B-Q1	39	30	14	170	1.0	0.5	28.1	122
SMBJ5367B-Q1	43	30	20	190	1.0	0.5	31.0	110
SMBJ5368B-Q1	47	25	25	210	1.0	0.5	33.8	100
SMBJ5369B-Q1	51	25	27	230	1.0	0.5	36.7	93.0
SMBJ5370B-Q1	56	20	35	280	1.0	0.5	40.3	86.0
SMBJ5371B-Q1	60	20	40	350	1.0	0.5	43.0	79.0
SMBJ5372B-Q1	62	20	42	400	1.0	0.5	44.6	76.0
SMBJ5373B-Q1	68	20	44	500	1.0	0.5	49.0	70.0
SMBJ5374B-Q1	75	20	45	620	1.0	0.5	54.0	63.0
SMBJ5375B-Q1	82	15	65	720	1.0	0.5	59.0	58.0
SMBJ5376B-Q1	87	15	75	760	1.0	0.5	63.0	54.5
SMBJ5377B-Q1	91	15	75	760	1.0	0.5	65.5	52.5
SMBJ5378B-Q1	100	12	90	800	1.0	0.5	72.0	47.5
SMBJ5379B-Q1	110	12	125	1000	1.0	0.5	79.2	43.0
SMBJ5380B-Q1	120	10	170	1150	1.0	0.5	86.4	39.5
SMBJ5381B-Q1	130	10	190	1250	1.0	0.5	93.2	36.6
SMBJ5382B-Q1	140	8.0	230	1500	1.0	0.5	101	34.0
SMBJ5383B-Q1	150	8.0	330	1500	1.0	0.5	108	31.6
SMBJ5384B-Q1	160	8.0	350	1650	1.0	0.5	115	29.4
SMBJ5385B-Q1	170	8.0	380	1750	1.0	0.5	122	28.0
SMBJ5386B-Q1	180	5.0	430	1750	1.0	0.5	130	26.4
SMBJ5387B-Q1	190	5.0	450	1850	1.0	0.5	137	25.0
SMBJ5388B-Q1	200	5.0	480	1850	1.0	0.5	144	23.6

**Note :**

(1) Suffix " A " indicates ± 10% tolerance, suffix " B " indicates ± 5% tolerance.

**Rating and characteristic curves**

FIG.1 POWER TEMPERATURE DERATING CURVE

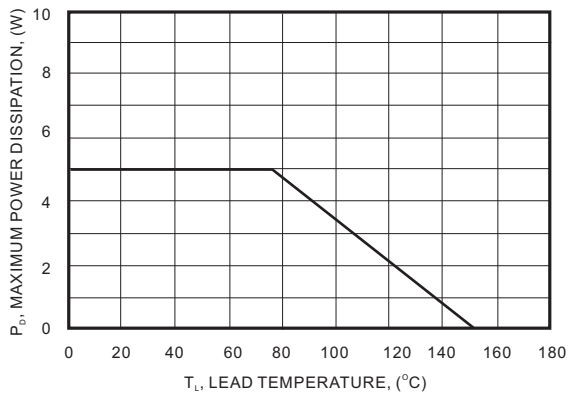
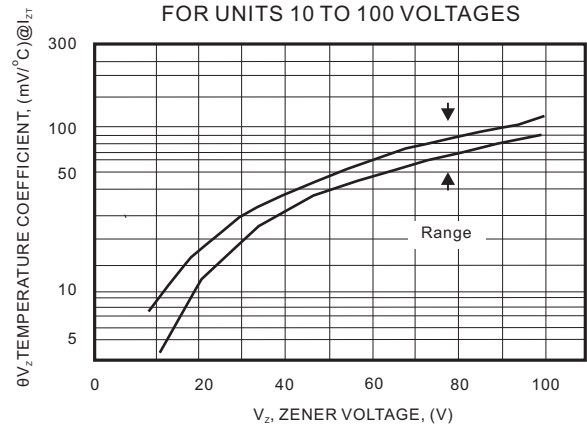




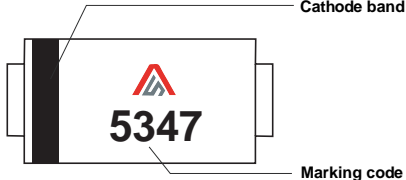
FIG.2 TEMPERATURE COEFFICIENT-RANGE FOR UNITS 10 TO 100 VOLTAGES



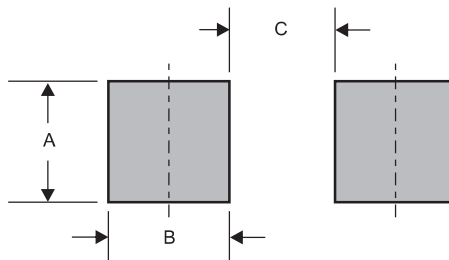
### Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

### Marking

Type number	Example
<b>SMBJ53-Q1 Series</b>	 <p>Cathode band</p> <p>Marking code</p>

### Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMB	0.090(2.30)	0.098(2.50)	0.070(1.80)