



**PRODUCT NAME :** 1N5383B 150V 5W Zener Diodes (Pack of 5)

**PRICE :** Rs 25.00

**SKU :** RM1939



(Pack of 5)

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## DESCRIPTION

## Features

- Nominal Zener Voltage ( $V_z$ ): 150V
- Max. Regulator Current ( $I_{zm}$ ): 0.031A
- Max. Reverse Leakage Current ( $I_r$ ): 0.5 $\mu$ A
- Total Power Dissipation ( $P_{tot}$ ): 5W

**MOTOROLA  
 SEMICONDUCTOR  
 TECHNICAL DATA**

**5 Watt Surmetic 40  
 Silicon Zener Diodes**

This is a complete series of 5 Watt Zener Diodes with tight limits and better operating characteristics that reflect the superior capabilities of silicon-oxide-passivated junctions. All this is in an axial-lead, transfer-molded plastic package that offers protection in all common environmental conditions.

**Specification Features:**

- Up to 180 Watt Surge Rating @ 8.3 ms
- Maximum Limits Guaranteed on Seven Electrical Parameters

**Mechanical Characteristics:**

**CASE:** Void-free, transfer-molded, thermosetting plastic

**FINISH:** All external surfaces are corrosion resistant and leads are readily solderable

**POLARITY:** Cathode indicated by color band. When operated in zener mode, cathode will be positive with respect to anode

**MOUNTING POSITION:** Any

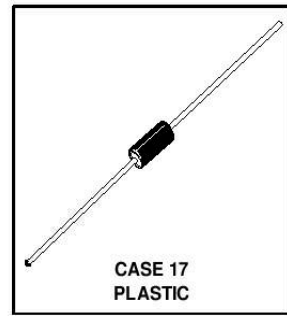
**WEIGHT:** 0.7 gram (approx)

**WAFER FAB LOCATION:** Phoenix, Arizona

**ASSEMBLY/TEST LOCATION:** Seoul, Korea

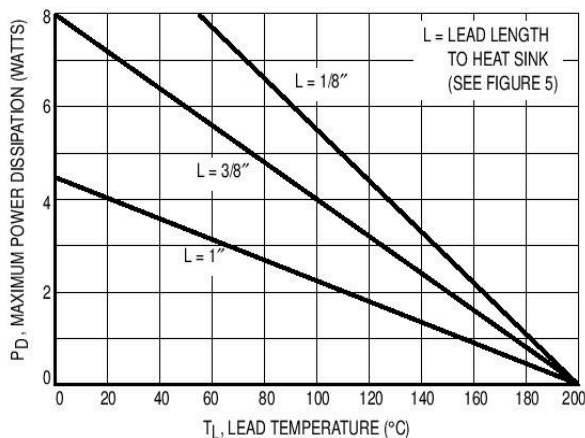
**1N5333B  
 through  
 1N5388B**

**5 WATT  
 ZENER REGULATOR  
 DIODES  
 3.3–200 VOLTS**



**MAXIMUM RATINGS**

Rating	Symbol	Value	Unit
DC Power Dissipation @ $T_L = 75^\circ\text{C}$ Lead Length = 3/8" Derate above 75°C	$P_D$	5 40	Watts mW/°C
Operating and Storage Junction Temperature Range	$T_J, T_{stg}$	-65 to +200	°C



**Figure 1. Power Temperature Derating Curve**

### 1N5333B through 1N5388B

**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted,  $V_F = 1.2$  Max @  $I_F = 1$  A for all types)

JEDEC Type No. (Note 1)	Nominal Zener Voltage $V_Z @ I_{ZT}$ Volts (Note 2)	Test Current $I_{ZT}$ mA	Max Zener Impedance		Max Reverse Leakage Current		Max Surge Current $i_{FS}$ Amps (Note 3)	Max Voltage Regulation $\Delta V_Z$ , Volt (Note 4)	Maximum Regulator Current $I_{ZM}$ mA (Note 5)
			$Z_{ZT} @ I_{ZT}$ Ohms (Note 2)	$Z_{ZK} @ I_{ZK} = 1$ mA Ohms (Note 2)	$I_R @ V_R$ $\mu\text{A}$ Volts				
<b>1N5333B</b>	<b>3.3</b>	<b>380</b>	<b>3</b>	<b>400</b>	<b>300</b>	<b>1</b>	<b>20</b>	<b>0.85</b>	<b>1440</b>
1N5334B	3.6	350	2.5	500	150	1	18.7	0.8	1320
1N5335B	3.9	320	2	500	50	1	17.6	0.54	1220
1N5336B	4.3	290	2	500	10	1	16.4	0.49	1100
<b>1N5337B</b>	<b>4.7</b>	<b>260</b>	<b>2</b>	<b>450</b>	<b>5</b>	<b>1</b>	<b>15.3</b>	<b>0.44</b>	<b>1010</b>
<b>1N5338B</b>	<b>5.1</b>	<b>240</b>	<b>1.5</b>	<b>400</b>	<b>1</b>	<b>1</b>	<b>14.4</b>	<b>0.39</b>	<b>930</b>
<b>1N5339B</b>	<b>5.6</b>	<b>220</b>	<b>1</b>	<b>400</b>	<b>1</b>	<b>2</b>	<b>13.4</b>	<b>0.25</b>	<b>865</b>
1N5340B	6	200	1	300	1	3	12.7	0.19	790
<b>1N5341B</b>	<b>6.2</b>	<b>200</b>	<b>1</b>	<b>200</b>	<b>1</b>	<b>3</b>	<b>12.4</b>	<b>0.1</b>	<b>765</b>
<b>1N5342B</b>	<b>6.8</b>	<b>175</b>	<b>1</b>	<b>200</b>	<b>10</b>	<b>5.2</b>	<b>11.5</b>	<b>0.15</b>	<b>700</b>
1N5343B	7.5	175	1.5	200	10	5.7	10.7	0.15	630
1N5344B	8.2	150	1.5	200	10	6.2	10	0.2	580
1N5345B	8.7	150	2	200	10	6.6	9.5	0.2	545
1N5346B	9.1	150	2	150	7.5	6.9	9.2	0.22	520
<b>1N5347B</b>	<b>10</b>	<b>125</b>	<b>2</b>	<b>125</b>	<b>5</b>	<b>7.6</b>	<b>8.6</b>	<b>0.22</b>	<b>475</b>
1N5348B	11	125	2.5	125	5	8.4	8	0.25	430
<b>1N5349B</b>	<b>12</b>	<b>100</b>	<b>2.5</b>	<b>125</b>	<b>2</b>	<b>9.1</b>	<b>7.5</b>	<b>0.25</b>	<b>395</b>
<b>1N5350B</b>	<b>13</b>	<b>100</b>	<b>2.5</b>	<b>100</b>	<b>1</b>	<b>9.9</b>	<b>7</b>	<b>0.25</b>	<b>365</b>
1N5351B	14	100	2.5	75	1	10.6	6.7	0.25	340
<b>1N5352B</b>	<b>15</b>	<b>75</b>	<b>2.5</b>	<b>75</b>	<b>1</b>	<b>11.5</b>	<b>6.3</b>	<b>0.25</b>	<b>315</b>
<b>1N5353B</b>	<b>16</b>	<b>75</b>	<b>2.5</b>	<b>75</b>	<b>1</b>	<b>12.2</b>	<b>6</b>	<b>0.3</b>	<b>295</b>
1N5354B	17	70	2.5	75	0.5	12.9	5.8	0.35	280
1N5355B	18	65	2.5	75	0.5	13.7	5.5	0.4	265
1N5356B	19	65	3	75	0.5	14.4	5.3	0.4	250
1N5357B	20	65	3	75	0.5	15.2	5.1	0.4	237
<b>1N5358B</b>	<b>22</b>	<b>50</b>	<b>3.5</b>	<b>75</b>	<b>0.5</b>	<b>16.7</b>	<b>4.7</b>	<b>0.45</b>	<b>216</b>
<b>1N5359B</b>	<b>24</b>	<b>50</b>	<b>3.5</b>	<b>100</b>	<b>0.5</b>	<b>18.2</b>	<b>4.4</b>	<b>0.55</b>	<b>198</b>
1N5360B	25	50	4	110	0.5	19	4.3	0.55	190
<b>1N5361B</b>	<b>27</b>	<b>50</b>	<b>5</b>	<b>120</b>	<b>0.5</b>	<b>20.6</b>	<b>4.1</b>	<b>0.6</b>	<b>176</b>
1N5362B	28	50	6	130	0.5	21.2	3.9	0.6	170
1N5363B	30	40	8	140	0.5	22.8	3.7	0.6	158
1N5364B	33	40	10	150	0.5	25.1	3.5	0.6	144
<b>1N5365B</b>	<b>36</b>	<b>30</b>	<b>11</b>	<b>160</b>	<b>0.5</b>	<b>27.4</b>	<b>3.3</b>	<b>0.65</b>	<b>132</b>
1N5366B	39	30	14	170	0.5	29.7	3.1	0.65	122
1N5367B	43	30	20	190	0.5	32.7	2.8	0.7	110
<b>1N5368B</b>	<b>47</b>	<b>25</b>	<b>25</b>	<b>210</b>	<b>0.5</b>	<b>35.8</b>	<b>2.7</b>	<b>0.8</b>	<b>100</b>
1N5369B	51	25	27	230	0.5	38.8	2.5	0.9	93
1N5370B	56	20	35	280	0.5	42.6	2.3	1	86
1N5371B	60	20	40	350	0.5	42.5	2.2	1.2	79
1N5372B	62	20	42	400	0.5	47.1	2.1	1.35	76
1N5373B	68	20	44	500	0.5	51.7	2	1.5	70
1N5374B	75	20	45	620	0.5	56	1.9	1.6	63
1N5375B	82	15	65	720	0.5	62.2	1.8	1.8	58
1N5376B	87	15	75	760	0.5	66	1.7	2	54.5
1N5377B	91	15	75	760	0.5	69.2	1.6	2.2	52.5
1N5378B	100	12	90	800	0.5	76	1.5	2.5	47.5
1N5379B	110	12	125	1000	0.5	83.6	1.4	2.5	43
1N5380B	120	10	170	1150	0.5	91.2	1.3	2.5	39.5
1N5381B	130	10	190	1250	0.5	98.8	1.2	2.5	36.6
1N5382B	140	8	230	1500	0.5	106	1.2	2.5	34

(continued)

Devices listed in bold, italic are Motorola preferred devices.

