



**Micro Commercial Components**  
 Micro Commercial Components  
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**ZY5.1  
 THRU  
 ZY51**

**Silicon  
 2.0 Watt  
 Zener Diodes**

**Features**

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Silicon Power Zener Diodes
- 5.1 thru 51 Volt Voltage Range
- Standard Tolerance of Zener Voltage  $\pm 5\%$

**Mechanical Data**

- Plastic Case: DO-41
- Weight Approx: 0.33 g
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1

**Maximum Ratings @ 25°C Unless Otherwise Specified**

Power Dissipation	$P_{tot}$	2.0	Watt
Thermal Resistance Junction to Ambient Air	$R_{thJA}$	<45	K/W
Thermal Resistance Junction to Terminal	$R_{thJT}$	<15	K/W
Operation Temperature	$T_J$	-50°C to +150°C	
Storage Temperature	$T_{STG}$	-50°C to +175°C	

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

DO-41

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.160	0.205	4.10	5.20	
B	0.080	0.107	2.00	2.70	Diameter
C	0.028	0.034	0.71	0.86	Diameter
D	1.000	-----	25.40	-----	

ZY5.1 THRU ZY51

Type	Zener Voltage			Dynamic Resistance		Reverse Current		Z-current
	V <sub>Z</sub> (V)		Test Condition	r <sub>d</sub> (Ω)	Test Condition	I <sub>R</sub> (μA)	Test Condition	I <sub>Zmax</sub> (mA) @T <sub>a</sub> =50°C
	Min	Max	I <sub>Z</sub> (mA)	Max	I <sub>Z</sub> (mA)	Max	V <sub>R</sub> (V)	Max
ZY5.1	4.8	5.4	100	5	100	2	1	333
ZY5.6	5.2	6.0	100	3	100	1	1	300
ZY6.2	5.8	6.6	100	2	100	1	1.5	273
ZY6.8	6.4	7.2	100	2	100	1	2	250
ZY7.5	7.0	7.9	100	2	100	1	2	228
ZY8.2	7.7	8.7	100	2	100	1	3.5	207
ZY9.1	8.5	9.6	50	4	50	1	3.5	188
ZY10	9.4	10.6	50	4	50	1	5	170
ZY11	10.4	11.6	50	6	50	1	5	155
ZY12	11.4	12.7	50	7	50	1	7	142
ZY13	12.4	14.1	50	9	50	1	7	128
ZY15	13.8	15.6	50	10	50	1	10	115
ZY16	15.3	17.1	25	12	25	1	10	105
ZY18	16.8	19.1	25	15	25	1	10	94
ZY20	18.8	21.2	25	15	25	1	10	85
ZY22	20.8	23.3	25	15	25	1	12	77
ZY24	22.8	25.6	25	15	25	1	12	70
ZY27	25.1	28.9	25	15	25	1	14	62
ZY30	28	32	25	15	25	1	14	56
ZY33	31	35	25	15	25	1	17	51
ZY36	34	38	10	30	10	1	17	47
ZY39	37	41	10	40	10	1	20	44
ZY43	40	46	10	40	10	1	20	39
ZY47	44	50	10	40	10	1	24	36
ZY51	48	54	10	60	10	1	24	33



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## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel; 5Kpcs/Reel
(Part Number)-AP	Ammo Packing;5Kpcs/AmmoBox
(Part Number)-BP	Bulk;1Kpcs/Box

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