



Certificate Number: Q10561

Certificate Number: E17276

# Z043 - Z0200

Vz : 43 - 200 Volts

Pd : 0.5 Watt

## FEATURES :

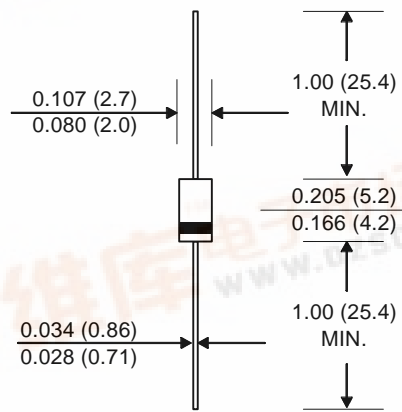
- \* Complete voltage range 43 to 200 Volts
- \* High peak reverse power dissipation
- \* High reliability
- \* Low leakage current
- \* Pb / RoHS Free

## MECHANICAL DATA

- \* Case : DO-41 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.339 gram

# SILICON ZENER DIODES

## DO - 41



Dimensions in inches and ( millimeters )

## MAXIMUM RATINGS

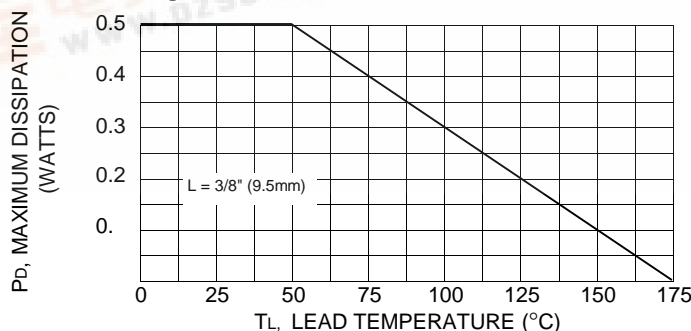
Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at TL = 50 °C (Note1)	Pd	0.5	Watt
Maximum Forward Voltage at IF = 200 mA	VF	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	RθJA	170	K / W
Junction Temperature Range	TJ	- 55 to + 175	°C
Storage Temperature Range	Ts	- 55 to + 175	°C

### Notes :

- (1) TL = Lead temperature at 3/8 " (9.5mm) from body
- (2) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.

Fig. 1 POWER TEMPERATURE DERATING CURVE





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## ELECTRICAL CHARACTERISTICS

Rating at = 25 °C ambient temperature unless otherwise specified

Type No.	Nominal Zener Voltage	Test Current	Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current	Maximum Surge 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>	I <sub>RM</sub> <sup>(2)</sup>
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)	(mApk)
<b>Z043</b>	43	2.75	70	1500	0.25	5.0	32	11.0	52
<b>Z047</b>	47	2.40	80	1500	0.25	5.0	35	9.6	47
<b>Z051</b>	51	2.23	95	1500	0.25	5.0	38	8.9	44
<b>Z056</b>	56	2.00	110	2000	0.25	5.0	42	8.0	40
<b>Z062</b>	62	1.83	125	2000	0.25	5.0	47	7.3	36
<b>Z068</b>	68	1.65	150	2000	0.25	5.0	52	6.6	33
<b>Z075</b>	75	1.50	175	2000	0.25	5.0	57	6.0	30
<b>Z082</b>	82	1.37	200	3000	0.25	5.0	62	5.5	27
<b>Z091</b>	91	1.25	250	3000	0.25	5.0	73	5.0	24
<b>Z0100</b>	100	1.12	350	3000	0.25	5.0	76	4.5	22
<b>Z0110</b>	110	1.00	450	4000	0.25	5.0	83	4.1	20
<b>Z0120</b>	120	0.95	550	4500	0.25	5.0	91	3.8	18
<b>Z0130</b>	130	0.88	700	5000	0.25	5.0	98	3.5	17
<b>Z0150</b>	150	0.75	1000	6000	0.25	5.0	114	3.0	15
<b>Z0160</b>	160	0.70	1100	6500	0.25	5.0	121	2.8	14
<b>Z0180</b>	180	0.62	1400	7000	0.25	5.0	136	2.5	12.5
<b>Z0190</b>	190	0.57	1400	7500	0.25	5.0	144	2.3	11.8
<b>Z0200</b>	200	0.55	1700	8000	0.25	5.0	152	2.2	11.2

**Note :**

(1) The type number listed have a standard tolerance on the nominal zener voltage of ±10%. Add suffix "A" for ±5% tolerance