

# Z043B - Z0200B

**V<sub>Z</sub> : 43 - 200 Volts**

**P<sub>D</sub> : 0.5 Watt**

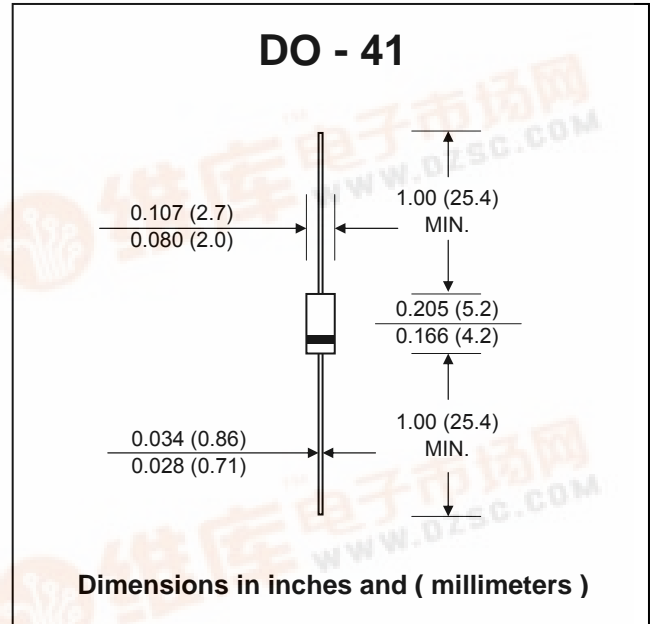
## FEATURES :

- \* Complete voltage range 43 to 200 Volts
- \* High peak reverse power dissipation
- \* High reliability
- \* Low leakage current
- \* ± 2% tolerance
- \* **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



## MAXIMUM RATINGS

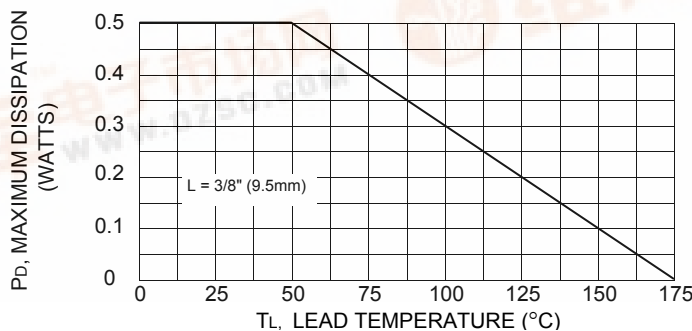
Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at T <sub>L</sub> = 50 °C (Note1)	P <sub>D</sub>	0.5	Watt
Maximum Forward Voltage at I <sub>F</sub> = 200 mA	V <sub>F</sub>	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	R <sub>θJA</sub>	170	K / W
Junction Temperature Range	T <sub>J</sub>	- 55 to + 175	°C
Storage Temperature Range	T <sub>STG</sub>	- 55 to + 175	°C

### Notes :

- (1) T<sub>L</sub> = 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





Certificate TH97/10561QM

Certificate TW00/17276EM

## 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
	$V_Z @ I_{ZT}$	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_{ZK}$	$I_R @ V_R$		$I_{ZM}$	$I_{RM}^{(2)}$
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)	(mApk)
Z043B	43	2.75	70	1500	0.25	5.0	32	11	52
Z047B	47	2.40	80	1500	0.25	5.0	35	9.6	47
Z051B	51	2.23	95	1500	0.25	5.0	38	8.9	44
Z056B	56	2.00	110	2000	0.25	5.0	42	8.0	40
Z062B	62	1.83	125	2000	0.25	5.0	47	7.3	36
Z068B	68	1.65	150	2000	0.25	5.0	52	6.6	33
Z075B	75	1.50	175	2000	0.25	5.0	57	6.0	30
Z082B	82	1.37	200	3000	0.25	5.0	62	5.5	27
Z091B	91	1.25	250	3000	0.25	5.0	73	5.0	24
Z0100B	100	1.12	350	3000	0.25	5.0	76	4.5	22
Z0110B	110	1.00	450	4000	0.25	5.0	83	4.1	20
Z0120B	120	0.95	550	4500	0.25	5.0	91	3.8	18
Z0130B	130	0.88	700	5000	0.25	5.0	98	3.5	17
Z0150B	150	0.75	1000	6000	0.25	5.0	114	3.0	15
Z0160B	160	0.70	1100	6500	0.25	5.0	121	2.8	14
Z0180B	180	0.62	1400	7000	0.25	5.0	136	2.5	12.5
Z0190B	190	0.57	1400	7500	0.25	5.0	144	2.3	11.8
Z0200B	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 ±2%.  
Add suffix "A" for ±5% tolerance.No suffix for ±10% tolerance