

Z043 - Z0200

V_z : 43 - 200 Volts

P_D : 0.5 Watt

FEATURES :

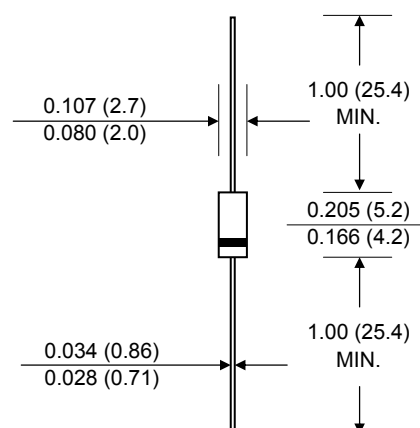
- * Complete voltage range 43 to 200 Volts
- * High peak reverse power dissipation
- * High reliability
- * Low leakage current
- * Pb / RoHS Free

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

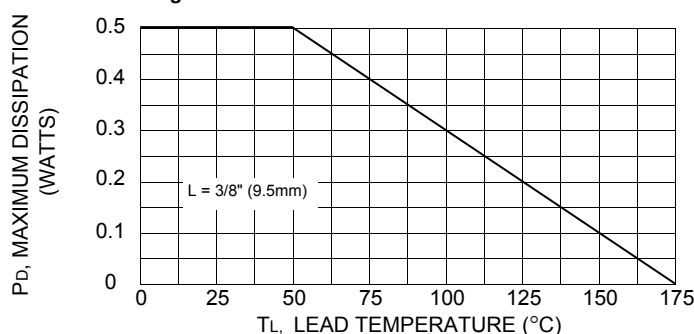
Rating at 25 °C ambient temperature unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at T _L = 50 °C (Note1)	P _D	0.5	Watt
Maximum Forward Voltage at I _F = 200 mA	V _F	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	R _{θJA}	170	K / W
Junction Temperature Range	T _J	- 55 to + 175	°C
Storage Temperature Range	T _{STG}	- 55 to + 175	°C

Notes :

- (1) T_L = 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



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)
Z043	43	2.75	70	1500	0.25	5.0	32	11.0	52
Z047	47	2.40	80	1500	0.25	5.0	35	9.6	47
Z051	51	2.23	95	1500	0.25	5.0	38	8.9	44
Z056	56	2.00	110	2000	0.25	5.0	42	8.0	40
Z062	62	1.83	125	2000	0.25	5.0	47	7.3	36
Z068	68	1.65	150	2000	0.25	5.0	52	6.6	33
Z075	75	1.50	175	2000	0.25	5.0	57	6.0	30
Z082	82	1.37	200	3000	0.25	5.0	62	5.5	27
Z091	91	1.25	250	3000	0.25	5.0	73	5.0	24
Z0100	100	1.12	350	3000	0.25	5.0	76	4.5	22
Z0110	110	1.00	450	4000	0.25	5.0	83	4.1	20
Z0120	120	0.95	550	4500	0.25	5.0	91	3.8	18
Z0130	130	0.88	700	5000	0.25	5.0	98	3.5	17
Z0150	150	0.75	1000	6000	0.25	5.0	114	3.0	15
Z0160	160	0.70	1100	6500	0.25	5.0	121	2.8	14
Z0180	180	0.62	1400	7000	0.25	5.0	136	2.5	12.5
Z0190	190	0.57	1400	7500	0.25	5.0	144	2.3	11.8
Z0200	200	0.55	1900	9990	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 $\pm 10\%$.
Add suffix "A" for $\pm 5\%$ tolerance, Add suffix "B" for $\pm 2\%$ tolerance.