Z1220C ~ Z1380C

SILICON ZENER DIODES

V_Z : 220 - 380 Volts
P_D : 1 Watt

FEATURES :

* Complete voltage range 220 to 380 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 : 0.335 gram

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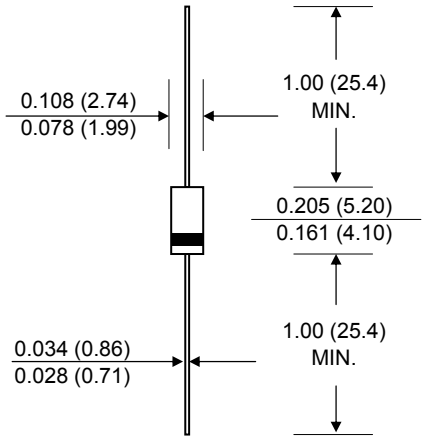

Dimensions in inches and (millimeters)

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	1.0	W
Maximum Forward Voltage at I_F = 200 mA	V_F	2.0	V
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R_{\Theta JA}$	170	K / W
Junction Temperature Range	T_J	- 55 to + 175	°C
Storage Temperature Range	T_{STG}	- 55 to + 175	°C

ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Type No.	Nominal Zener Voltage		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} (4)
(Note 3)	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)	(mApk)
Z1220C	220	1.00	1600	8000	0.25	5.0	167.2	4.0	20
Z1240C	240	0.93	1800	8500	0.25	5.0	182.4	3.8	19
Z1250C	250	0.90	2000	9000	0.25	5.0	190	3.6	18
Z1270C	270	0.82	2100	9000	0.25	5.0	205	3.3	16
Z1300C	300	0.75	2300	9500	0.25	5.0	228	3.0	15
Z1330C	330	0.70	2500	9500	0.25	5.0	250	2.8	13
Z1380C	380	0.60	2700	9500	0.25	5.0	288	2.4	12

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.

(3) The type number listed have a standard tolerance on the nominal zener voltage of ± 2%.
No suffix indicates ± 10% tolerance, suffix "A" indicates ± 5% tolerance.

(4) The revese surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I_{ZT} per JEDEC Method