SZ10D2 - SZ10E0

SURFACE MOUNT SILICON ZENER DIODES

V_Z : 220 - 300 Volts
P_D : 1 Watt

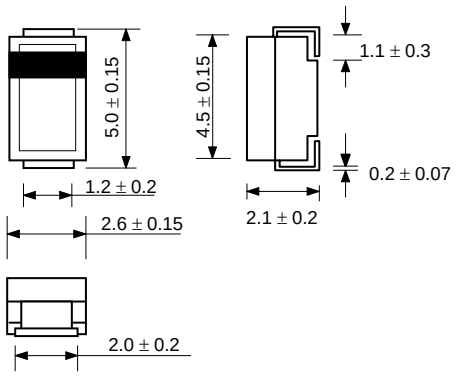
FEATURES :

* Complete Voltage Range 220 to 300 Volts
* High peak reverse power dissipation
* High reliability
* Low leakage current
* Pb / RoHS Free

MECHANICAL DATA

* Case : SMA (DO-214AC) Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Lead formed for Surface mount
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.064 gram

SMA (DO-214AC)



Dimensions in millimeters

MAXIMUM RATINGS (Rating at 25 °C ambient temperature unless otherwise specified)

Rating	Symbol	Value	Unit
DC Power Dissipation at T_L = 75 °C (Note1)	P_D	1.0	W
Maximum Forward Voltage at I_F = 200 mA	V_F	2.0	V
Operating Junction Temperature Range	T_J	- 55 to + 150	°C
Storage Temperature Range	T_{STG}	- 55 to + 150	°C

ELECTRICAL CHARACTERISTICS (Ta = 25 °C unless otherwise specified)

Type	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}(3)
(Note 2)	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)	(mApk)
SZ10D2	220	1.00	1600	8000	0.25	5.0	167.2	4.0	20.0
SZ10D4	240	0.93	1800	8500	0.25	5.0	182.4	3.8	18.5
SZ10D5	250	0.90	2000	9000	0.25	5.0	190	3.6	18.0
SZ10D7	270	0.82	2100	9000	0.25	5.0	205	3.3	16.5
SZ10E0	300	0.75	2300	9500	0.25	5.0	228	3.0	15.0

Notes :

(1) P.C.B. Mounted on 0.31x0.31x0.08" (8x8x2mm) copper areas pads.

(2) The type number listed have a standard tolerance on the nominal zener voltage of ±10%, altered the fourth number of type from " 0 " for ±10% tolerance to be " 5 " for ±5.0% tolerance.

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

(4) " SZ " will be omitted in marking on the diode.