

Voltage Regulator Zener Diode



Features:

- Hermetically Sealed, Glass Passivated Silicon Diodes

Polarity : Cathode is indicated by a blue band.

Absolute Max. Ratings

Description	Symbol	Value	Unit
Power Dissipation $T_{tp} = 105^{\circ}\text{C}$	P_{tot}	2.3	W
Power Dissipation PCB mounted $T_{amb} = 55^{\circ}\text{C}$	P_{tot}	0.8	
Non-Repetitive Peak Reverse Power Dissipation $t_p = 100\mu\text{s}$, square pulse; $T_j = 25^{\circ}\text{C}$ prior to surge	P_{ZSM}	300	
Non-Repetitive Peak Reverse Power Dissipation; 10/100 μs , exponential pulse; $T_j = 25^{\circ}\text{C}$ prior to surge	P_{RSM}	150	
Storage Temperature	T_{stg}	- 65 to +175	$^{\circ}\text{C}$
Junction Temperature	T_j		

Thermal Resistance

Junction to Tie Point	$R_{thj(t-p)}$	30	K/W
Junction to Ambient	$*R_{th(j-s)}$	150	

* Device mounted on an epoxy glass printed circuit board, 1.5mm thick; thickness of Cu layer $\geq 40\mu\text{m}$
Per type when used as Voltage Regulator Diodes

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Electrical Characteristics ($T_a = 25^\circ\text{C}$ unless specified otherwise) $V_F < 1.2\text{V}$ at 200mA

Working Voltage			Differential Resistance r_{diff} (Ω) at I_z Max.	Temperature Coefficient S_z (%/K) at I_z Min. Max.		Test Current at I_z (mA)	Reverse Current at Reverse Voltage			Part Number
Min.	V_z (V) at I_z Nom.	Max.					I_R (μA) Max.	a_t	V_R (V)	
11.4	12	12.7	7	0.05	0.1	50	3		9.1	BZD27-C12
20.8	22	23.3	15	0.06	0.11	25	1		16	BZD27-C22

Part Number Table

Description	Part Number
Diode, Zener, 0.8W, SOD-87	BZD27-C12
	BZD27-C22

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