

Zeners/Studs

BZY93 Series

FEATURES

- Voltage Range 7.5 -75 Volts
- 1500 Watt Peak Pulse Power
- 20 Watt Steady State @ 75°C
- 15 Watt Steady State @ 100°C
- Glass passivated junction
- 1500 Watt surge capability at 1 ms
- Typically IR less than 5 μ A above 10V
- Excellent clamping capability
- Stud cathode & stud anode
- Operating temperature -55°C to +175°C
- 100% tested



AVAILABLE IN THE FOLLOWING CONFIGURATIONS

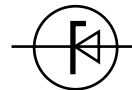
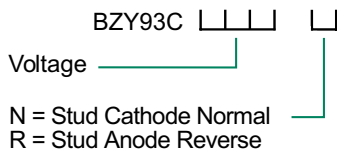
MECHANICAL CHARACTERISTICS

- Case: Hermetically sealed DO-4 outline
- Finish: All external surfaces are corrosion resistant and terminal solderable
- Polarity: Indicated by direction of zener symbol
- Weight: 4.2 grammes excluding mounting kit (approx)
- Torque setting 13inch/lb

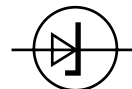
ELECTRICAL DATA

- Forward voltage V_F 1.5V max @ $I_F \leq 5A$ 300 μ S square wave pulse
- V_Z measured with pulse $\leq 100\mu$ S and duty cycle ≤ 0.001
- R_Z determined with DC plus 10% superimposed AC @ 1KHz

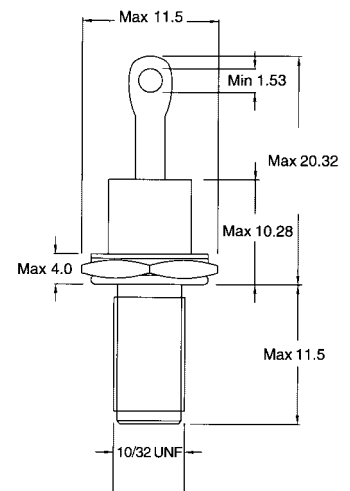
ORDERING INFORMATION



STUD CATHODE NORMAL



STUD ANODE REVERSE



All dimensions in mm

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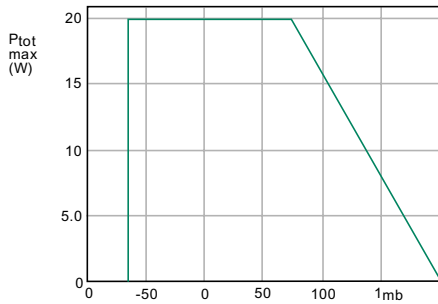


Figure 1. Maximum total dissipation plotted against mounting base temp

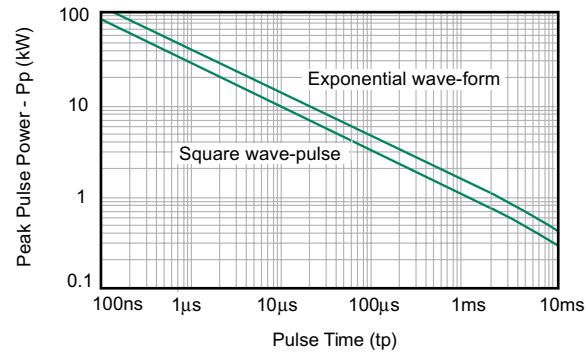


Figure 2. Non-repetitive peak pulse power rating curve

ELECTRICAL SPECIFICATION @ Tamb 25°C

Stud Cathode Part Number	Stud Anode Part Number	Zener Voltage Vz (Volts) @ Iz		Iz (A)	Zener Resistance Rz (Ω) @ Iz		Maximum Reverse Leakage IR @ VR	
		MIN	MAX		Typ	Max	(mA)	(Volts)
BZY93C7V5*	BZY93C7V5R	7.0	7.9	2.0	0.04	0.3	0.10	5.1
BZY93C8V2	BZY93C8V2R	7.7	8.7	2.0	0.05	0.3	0.10	5.6
BZY93C9V1*	BZY93C9V1R	8.5	9.6	1.0	0.07	0.5	0.05	6.2
BZY93C10	BZY93C10R	9.4	10.6	1.0	0.09	0.5	0.05	6.8
BZY93C11	BZY93C11R	10.4	11.6	1.0	0.08	1.0	0.05	7.5
BZY93C12*	BZY93C12R*	11.4	12.7	1.0	0.08	1.0	0.05	8.2
BZY93C13*	BZY93C13R*	12.4	14.1	1.0	0.08	1.0	0.05	9.1
BZY93C15	BZY93C15R*	13.8	15.6	1.0	0.10	1.2	0.05	10
BZY93C16	BZY93C16R	15.3	17.1	0.5	0.18	1.2	0.05	11
BZY93C18*	BZY93C18R*	16.8	19.1	0.5	0.20	1.5	0.05	12
BZY93C20	BZY93C20R	18.8	21.2	0.5	0.20	1.5	0.05	13
BZY93C22	BZY93C22R	20.8	23.3	0.5	0.21	1.8	0.05	15
BZY93C24	BZY93C24R	22.7	25.9	0.5	0.22	2.0	0.05	16
BZY93C27	BZY93C27R*	25.1	28.9	0.5	0.25	2.0	0.05	18
BZY93C30*	BZY93C30R	28.0	32.0	0.5	0.30	2.5	0.05	20
BZY93C33	BZY93C33R	31.0	35.0	0.5	0.75	4.0	0.05	22
BZY93C36	BZY93C36R*	34.0	38.0	0.2	0.85	5.0	0.05	24
BZY93C39	BZY93C39R	37.0	41.0	0.2	0.90	6.5	0.05	27
BZY93C43	BZY93C43R	40.0	46.0	0.2	1.00	7.0	0.05	30
BZY93C47	BZY93C47R	44.0	50.0	0.2	1.00	7.5	0.05	33
BZY93C51	BZY93C51R	48.0	54.0	0.2	1.20	8.0	0.05	36
BZY93C56*	BZY93C56R	52.0	60.0	0.2	1.30	9.0	0.05	39
BZY93C62	BZY93C62R	58.0	66.0	0.2	1.50	10.0	0.05	43
BZY93C68	BZY93C68R*	64.0	72.0	0.2	1.80	11.0	0.05	47
BZY93C75*	BZY93C75R	70.0	79.0	0.2	2.00	15.0	0.05	51

* Preferred voltages.