

Specification Sheet

300Z, 301Z, 500PZA SERIES Power Surge Suppressor -ZenerType

Major Ratings and Characteristics

	300Z/301Z	500PZA	Units
PZ	300	500	W
VZ	34.5 – 150		V
PZ	30.000		W
Tj	-40 to 175		C

Description/Features

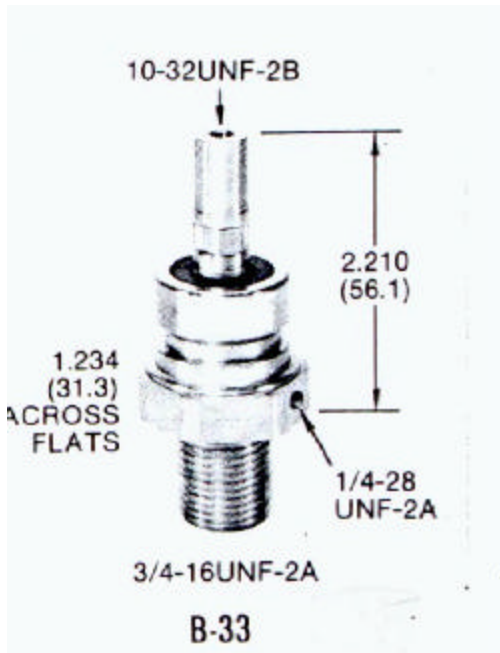
The 300Z, 301Z and 500PZA series zener type suppressors have superior clamping capability relative to other methods of surge suppression and nanosecond response time

Available in 5, 10 or 20% tolerances at the avalanche voltage

Applications include

- Voltage clippers
- Voltage regulators
- Voltage surge suppressors
for military, industrial and commercial use

In Popular DO-9 type metallic case.



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VOLTAGE RATINGS

PART NUMBER				VZSM - Max. Zener Voltage at Max. Zener Current (IZSM)		VR - Minimum Reverse Voltage (V) *2	Tolerance At Test Current IZT = 1.0A (%)
				VZSM (V)	@ IZSM (A) *1		
300Z34.5	301Z34.5	500PZA34.5	34.5	54	550	23	20
300Z50	301Z50	500PZA50	50	78	380	35	20
300Z75	301Z75	500PZA75	75	117	250	52	20
300Z100	301Z100	500PZA100	100	156	190	69	20
300Z125	301Z125	500PZA125	125	195	150	87	20
300Z150	301Z150	500PZA150	150	234	120	104	20
300Z34.5A	301Z34.5A	500PZA34.5A	34.5	49	610	27	10
300Z50A	301Z50A	500PZA50A	50	72	410	39	10
300Z75A	301Z75A	500PZA75A	75	107	280	58	10
300Z100A	301Z100A	500PZA100A	100	143	210	78	10
300Z125A	301Z125A	500PZA125A	125	179	160	98	10
300Z150A	301Z150A	500PZA150A	150	215	140	117	10
300Z34.5B	301Z34.5B	500PZA34.5B	34.5	47	630	28	5
300Z50B	301Z50B	500PZA50B	50	68	440	41	5
300Z75B	301Z75B	500PZA75B	75	102	290	61	5
300Z100B	301Z100B	500PZA100B	100	137	210	82	5
300Z125B	301Z125B	500PZA125B	125	171	170	103	5
300Z150B	301Z150B	500PZA150B	150	205	140	123	5

ELECTRICAL SPECIFICATIONS

	300Z/301Z	500PZA	Units Conditions
PZ Maximum zener power rating	300	500	Watts @ TC = 127 °C
IR Maximum leakage current	5.0	5.0	mA @ test voltage level
PZ Maximum zener power rating	30.000	30,000	Watts @ 1 ms

THERMAL-MECHANICAL SPECIFICATIONS

Tj	Max. operating junction temperature range	-40 to +175	-40 to +175	C	
Tstg	Max. storage temperature range	-40 to +175	-40 to +175	C	
RthJC	Max. internal thermal Resistance, junction to case	0.18	0.095	deg C/W	DC operation, double side cooled
RthCS	Thermal resistance, case-to-sink	0.08	0.09	deg C/W	One pole piece to one heat exchanger, mounting surface flat, smooth, and greased
f	Mounting force	-	1000 (4450)	N (lbf)	±10%
T	Mounting torque	31.1 to 37.6 (275 to 325)	-	N - m (lb-in)	
wt	Approximate weight	7.5 (213)	2.5 (71)	g (oz)	

CASE STYLES

300Z = B-33
 301Z = DO-9
 500PZA = DO-200AA

*1 TC = 25°C, Tp = t ms

*2 TC = 25°C. I = max. IR = 5.0 mA