



400 W Unidirectional Transient Voltage Suppressor Diodes

<p>DO-204AL (DO-41)</p> 	<p>Peak Pulse Power Rating At 1 ms. Exp. 400 W</p> 
	<p>FEATURES</p> <ul style="list-style-type: none"> • Glass passivated chip junction • Hyperrectifier structure for high reliability • 400 W peak pulse power capability with a 10/1000 μs waveform, repetitive rate (duty cycle): 0.01 % • Solder dip 260°C, 10s • AEC-Q101 qualified • Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC • Excellent clamping capability • Very fast response time • Low incremental surge resistance • Available in uni-directional
	<p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: DO-204AL (DO-41) Epoxy meets UL 94V-0 flammability rating. • Polarity: For uni-directional types the color band denotes cathode end. • Terminals: Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.
	<p>TYPICAL APPLICATIONS</p> <p>Used in sensitive electronics protection against voltage transients induced by inductive load switching and lighting on ICs, MOSFET, signal lines of sensor units for consumer, computer, industrial, automotive and telecommunication.</p>

Maximum Ratings and Electrical Characteristics at 25 °C

P_{pp}	Peak pulse power with 10/1000 μ s exponential pulse	400 W
T_j	Operating temperature range	- 55 to + 175 °C
T_{stg}	Storage temperature range	- 55 to + 175 °C
$P_{M(AV)}$	Steady State Power dissipation (l = 10mm)	1 W

Electrical Characteristics at Tamb = 25 °C

R_{thj-l}	Max. thermal resistance (l = 10 mm.)	60 °C/W
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Type	Maximum Reverse Leakage Current I_{RM} at V_{RM}		(1) Breakdown Voltage V_{BR} at I_R				Max. Clamping Voltage V_{CL} at I_{pp} max. 1ms. Expo.	
	(μ A)	(V)	Min.	Nom.	Max.	(mA)	(V)	(A)
Unidirectional								
BZW04P-15	5.0	15.3	17.1	18	18.9	1	25.2	16
BZW04P-28	5.0	28.2	31.4	33	34.7	1	45.7	8.8
BZW04P-31	5.0	30.8	34.2	36	37.8	1	49.9	8.0
BZW04P-102	5.0	102	114	120	126	1	165	2.4
BZW04P-256	5.0	256	285	300	315	1	414	1.2

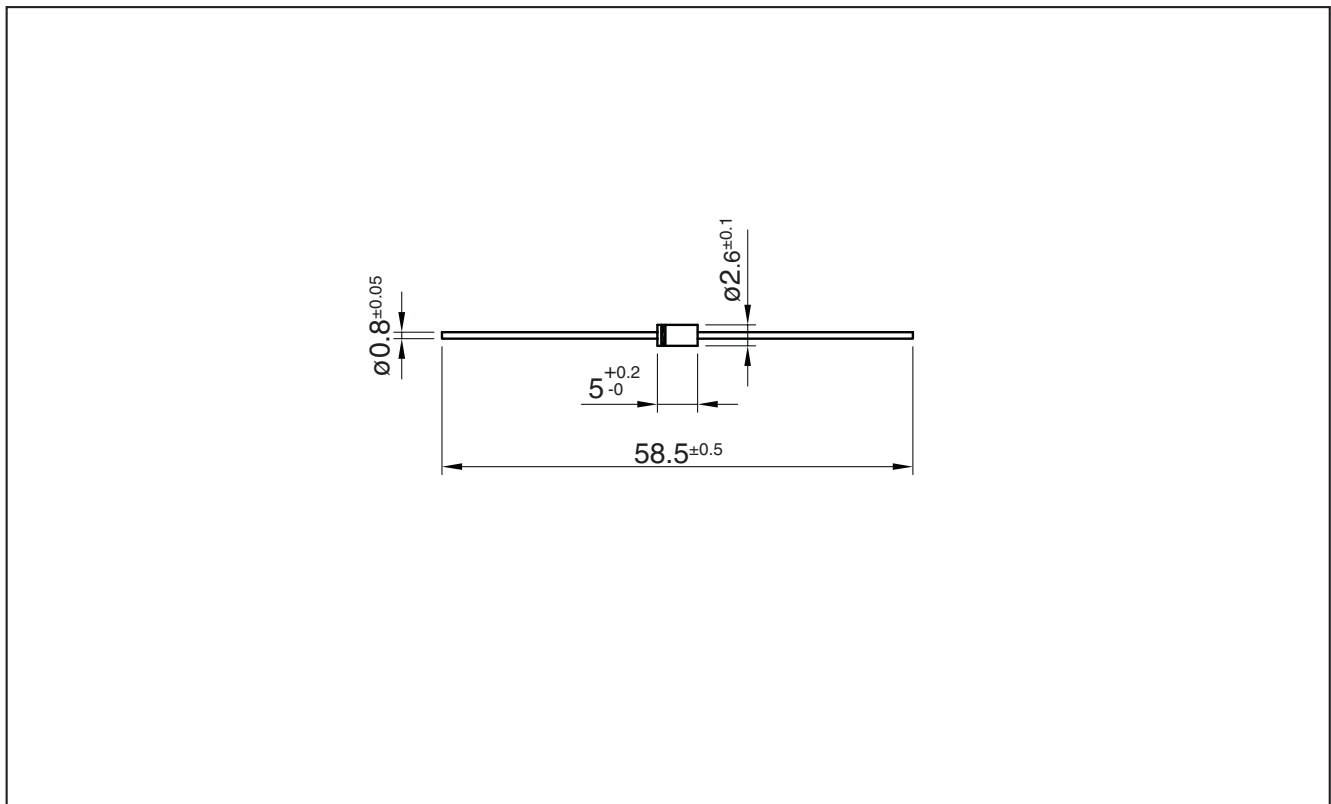
(1): Tested with pulses.
Pulse test: $t_p \leq ms$; $\delta < 2\%$

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Ordering information

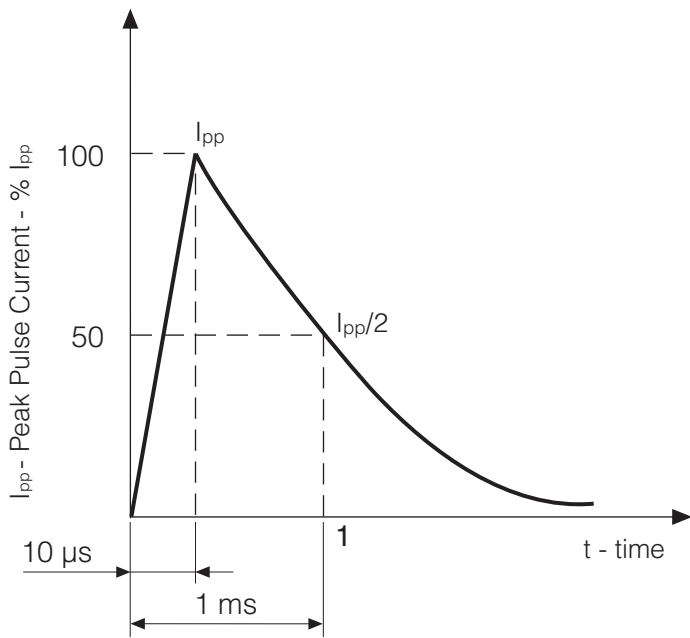
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
BZW04P-15 AMP	AMP	AMMO BOX	5,000	0.325

Package Outline Dimensions: (mm) DO-204AL (DO-41)

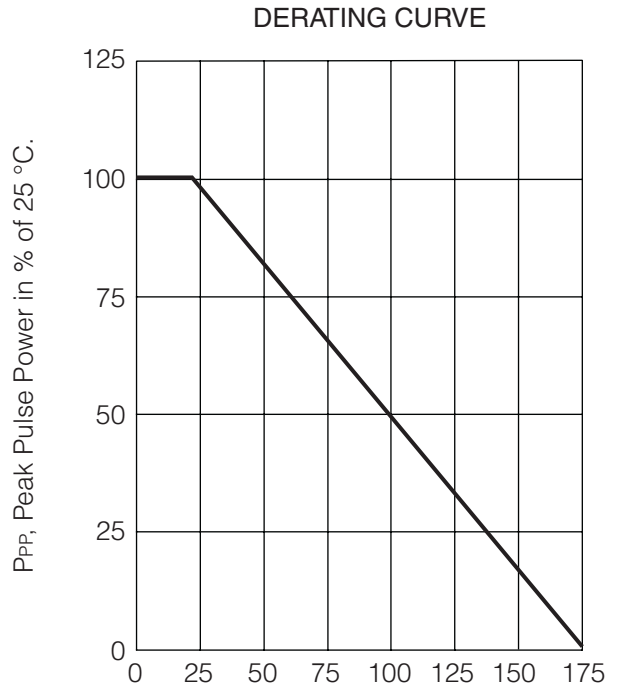


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Ratings and Characteristics (Ta 25 °C unless otherwise noted)

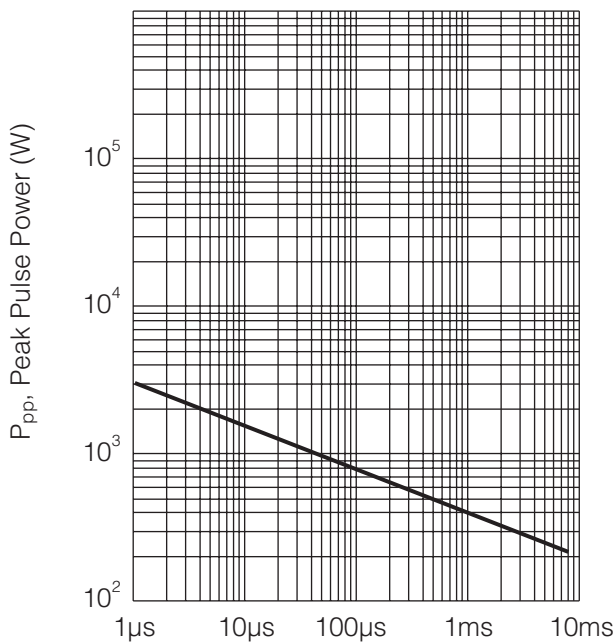


Pulse wave form 10/1000



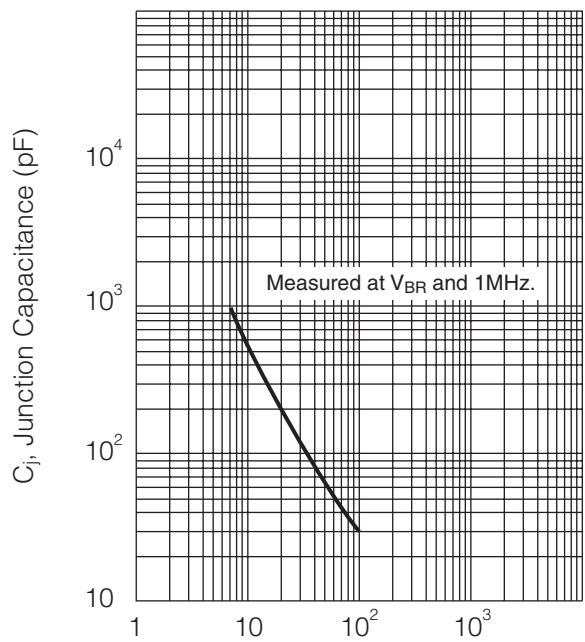
Temperature in °C

PEAK PULSE POWER RATING CURVE



Pulse Time - t

TYPICAL JUNCTION CAPACITANCE



V_{BR} - Breakdown voltage (V)

400 W Unidirectional Transient Voltage Suppressor Diodes**Revision History**

Date	Revision	Description of Changes
10-Sep-2009	0	Original Data Sheet
8-Jul-2016	1	Format update

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