

ESD3B...WS Series

Transient Voltage Suppressors

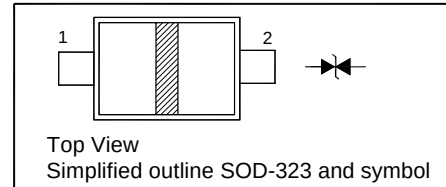
Bi-directional for ESD Protection

Features

- Low clamping voltage
- Low leakage

PINNING

PIN	DESCRIPTION
1	Anode
2	Anode



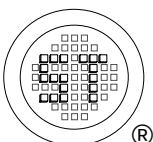
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_p = 8/20 \mu\text{s}$)	P_{pk}	350	W
ESD Voltage (HRB Waveform per IEC61000-4-2)	V_{ESD}	30	KV
Operating Junction Temperature	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Type	Reverse Stand-off Voltage	Reverse Current	Breakdown Voltage		Clamping Voltage ¹⁾				Peak Pulse Current ¹⁾	Capacitance	
	V_{RWM}	I_R at V_{RWM}	V_{BR}	at I_T	V_C	at I_{PP}	V_C	at I_{PP}	I_{PP}	C_j	at f
	Max. (V)	Max. (μA)	Min. (V)	mA	Max. (V)	A	Max. (V)	A	A	Max. (pF)	MHz
ESD3B5V0WS	5	10	6	1	9.8	5	14.5	24	24	200	1
ESD3B12WS	12	1	13.3	1	19	5	24	15	15	100	1
ESD3B15WS	15	1	16.7	1	24	5	29	12	12	75	1
ESD3B24WS	24	1	26.7	1	40	5	44	8	8	50	1

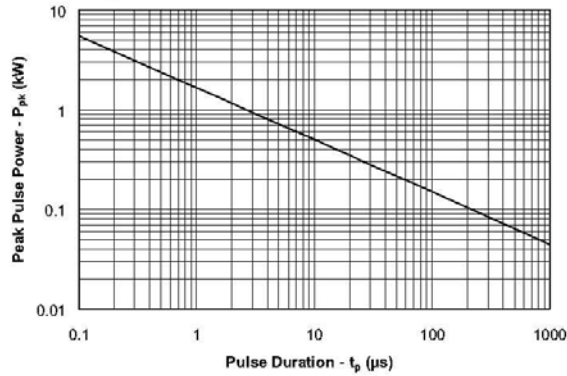
¹⁾ $t_p = 8/20 \mu\text{s}$



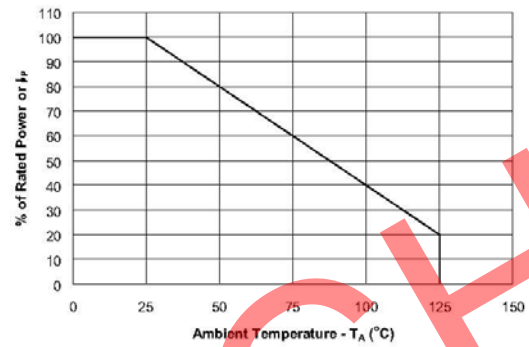
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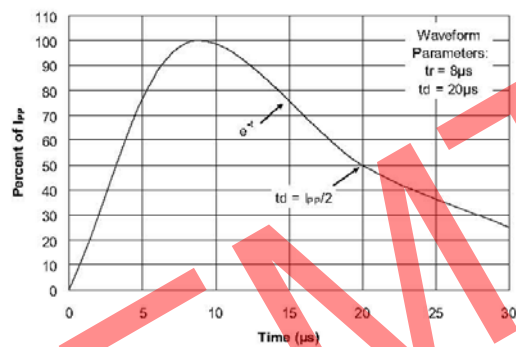
Non-Repetitive Peak Pulse Power vs. Pulse Time



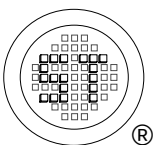
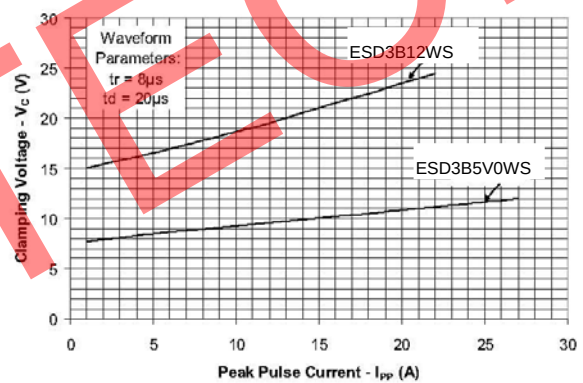
Power Derating Curve



Pulse Waveform



Clamping Voltage vs. Peak Pulse Current



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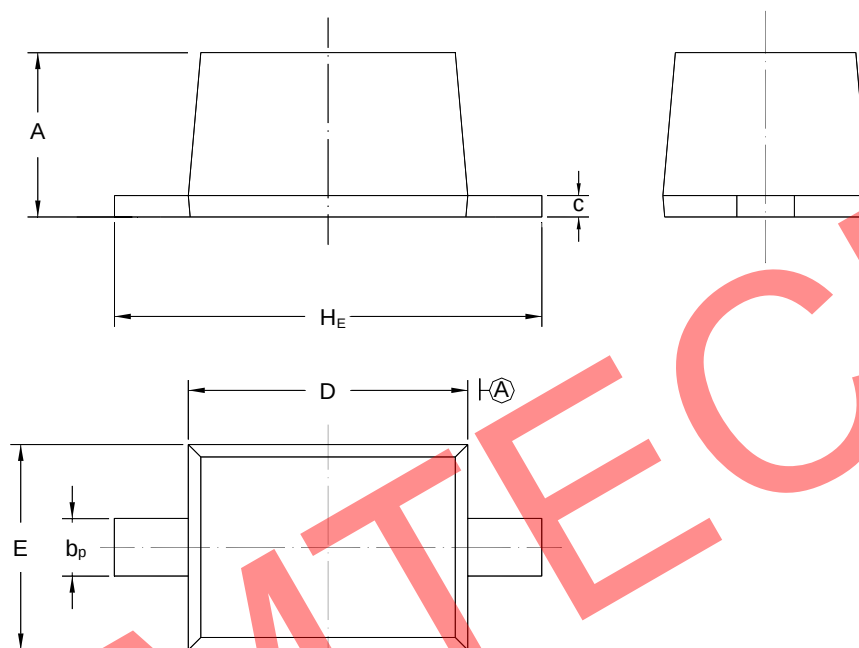


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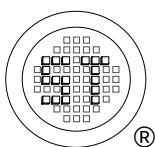
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b _p	C	D	E	H _E
mm	1.10 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30



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