



SE05L8BDDA

ESD PROTECTION DIODE

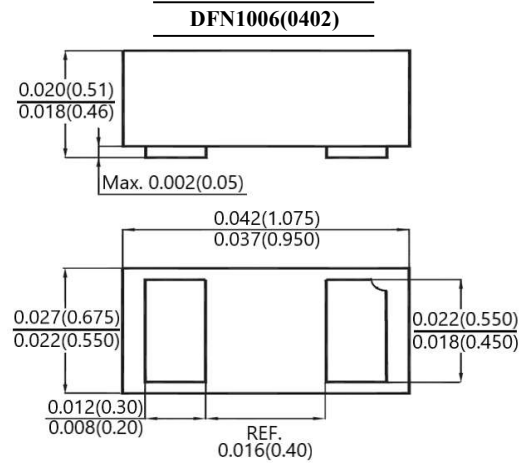
FEATURES

- IEC61000-4-2(ESD) 20kV(air), 12kV(Contact)
- Bi-direction high reliability
- Low Clamping Voltage
- Low Reverse Current
- Suffix " H " indicated Halogen-free part, ex.SE05L8BDDAH

MECHANICAL DATA

Case : DFN1006(0402) mold package

PIN CONFIGURATION



Dimensions in inch and (millimeter)

Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Units
Peak Pulse Power (tp = 8/20μs)	P _{PP}	80	W
Peak Pulse Current (tp = 8/20μs)	I _{PP}	4	A
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±20	kV
ESD per IEC 61000-4-2 (Contact)		±12	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C



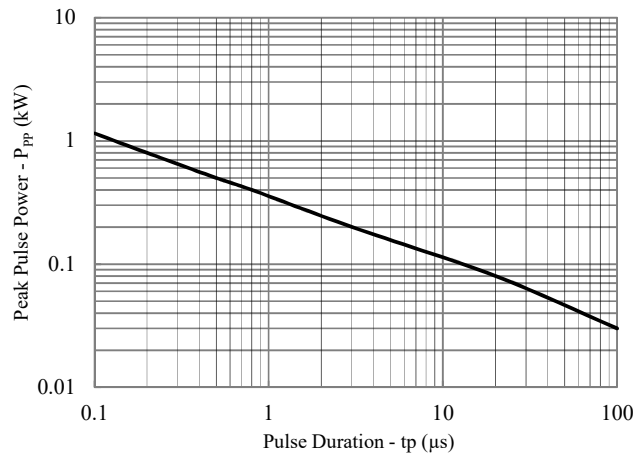
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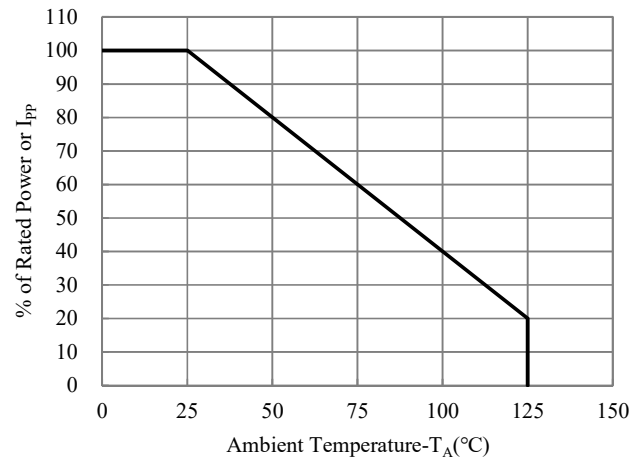
Electrical Characteristics Per line @ 25°C Unless Otherwise Specified

Parameter	Test Conditon	Symbol	Min	Max	Units
Reverse Stand-Off Voltage	-	V_{RWM}	-	5	V
Reverse Breakdown Voltage	$I_T=1\text{mA}$	V_{BR}	6	11	V
Reverse Leakage Current	$V_{RWM}=5\text{V}$	I_R	-	100	nA
Clamping Voltage	$I_{pp}=1\text{A}, t_p=8/20\mu\text{s}$	V_C	-	12	V
	$I_{pp}=4\text{A}, t_p=8/20\mu\text{s}$		-	20	
Junction Capacitance	$V_R=0\text{V}, f=1\text{MHz}$	C_J	-	0.8	pF

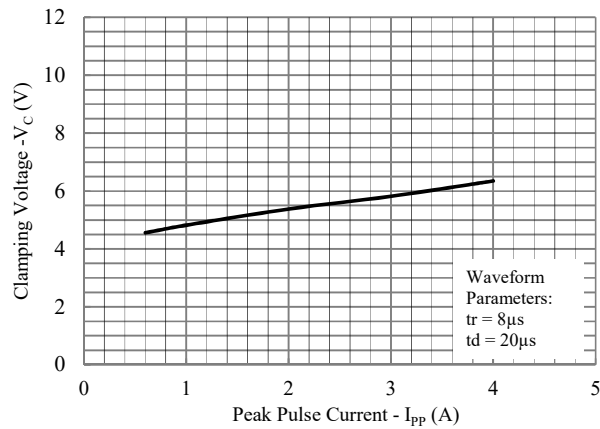
RATINGS AND CHARACTERISTIC CURVES



Non-Repetitive Peak Pulse Power vs. Pulse Time



Power Derating Curve



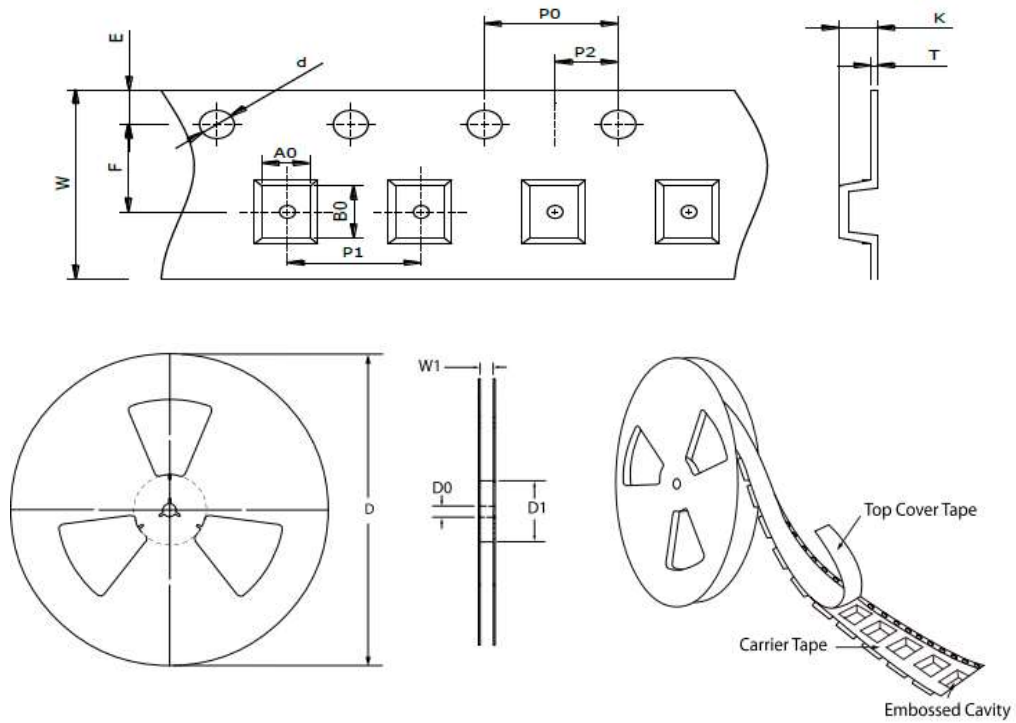
Clamping Voltage vs. Peak Pulse Current



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TAPE & REEL SPECIFICATION



Item	Symbol	DFN1006(0402)
Carrier width	A ₀	0.70 ± 0.10
Carrier length	B ₀	1.10 ± 0.10
Carrier depth	K	0.60 ± 0.10
Sprocket hole	d	1.50 ± 0.10
Reel outside diameter	D	178.00 ± 2.00
Feed hole width	D ₀	13.00 ± 0.50
Reel inner diameter	D ₁	MIN. 54.00
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocket hole pitch	P ₀	4.00 ± 0.10
Punch hole pitch	P ₁	2.00 ± 0.10
Embossment center	P ₂	2.00 ± 0.10
Overall tape thickness	T	MAX. 0.60
Tape width	W	8.00 ± 0.30
Reel width	W1	8.40 ± 1.50

ORDER INFORMATION

Package	Reel Size	Quantity
DFN1006(0402)	7"	10,000

MARKING CODE

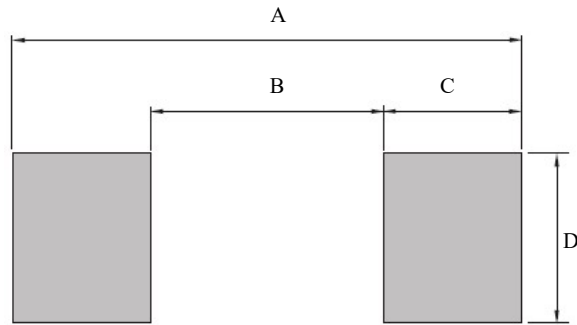
Part Number	Marking Code
SE05L8BDDA	3T



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SUGGESTED SOLDER PAD LAYOUT



Unit:mm

Package	A	B	C	D
DFN1006(0402)	1.10	0.30	0.40	0.60