



SE24Q2BDDAH

ESD PROTECTION DIODE

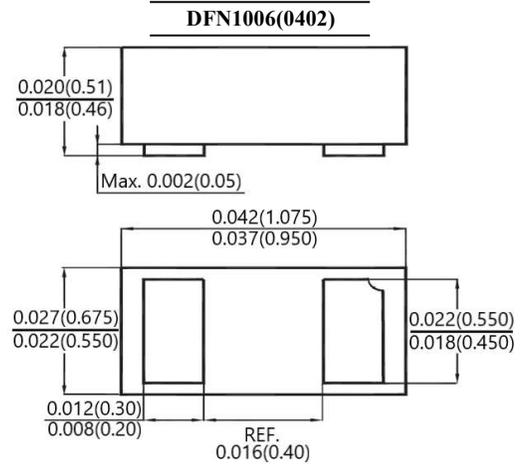
FEATURES

- Bidirectional ESD protection of one line
- Max. peak pulse power: $P_{PP}=280W$
- Low Clamping Voltage
- Low Reverse Current
- Suffix " H " indicated Halogen-free part, ex.SE24Q2BDDAH

MECHANICAL DATA

Case : DFN1006(0402) mold package

PIN CONFIGURATION



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

Parameter	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	280	W
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	5.5	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	± 30	kV
ESD per IEC 61000-4-2 (Contact)		± 30	
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}	-	24	V
Reverse Breakdown Voltage	$I_R=1\text{mA}$	V_{BR}	26.5	32.0	V
Reverse Leakage Current	$V_R=24\text{V}$	I_R	-	50	nA
Clamping Voltage	$I_{pp}=5.5\text{A}$, $t_p=8/20\mu\text{s}$	V_C	-	51	V
Junction Capacitance	$V_R=0\text{V}$, $f=1\text{MHz}$	C_J	-	20	pF

RATINGS AND CHARACTERISTIC CURVES

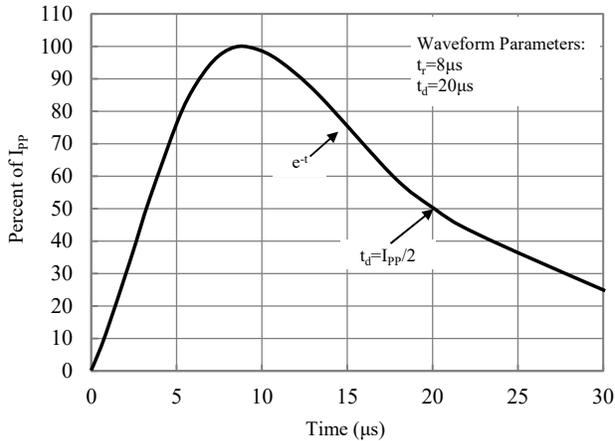


Fig. 1-Pulse Waveform

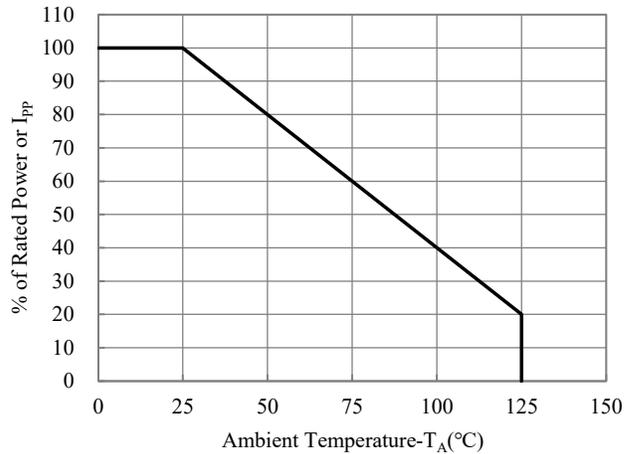


Fig. 2-Power Derating Curve

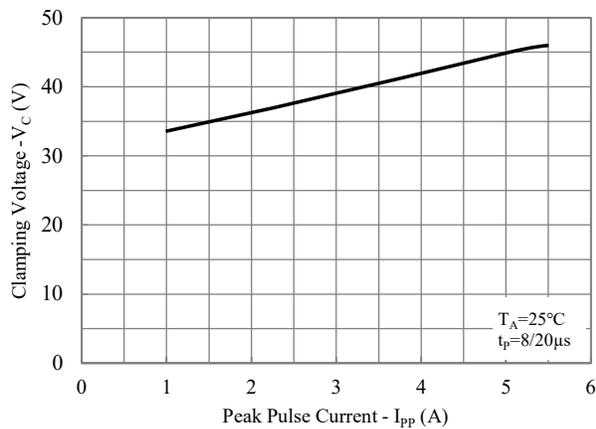


Fig. 3-Clamping Voltage vs. Peak Pulse Current

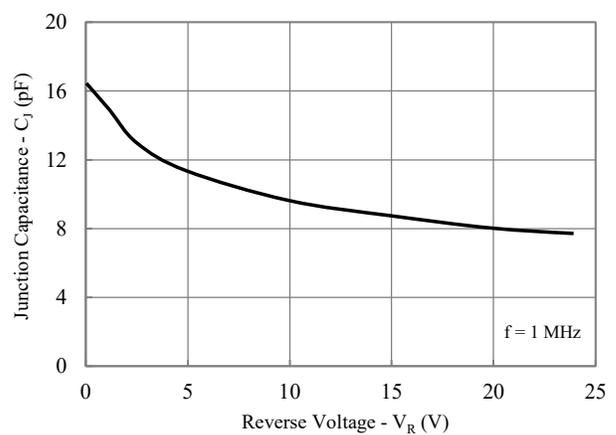


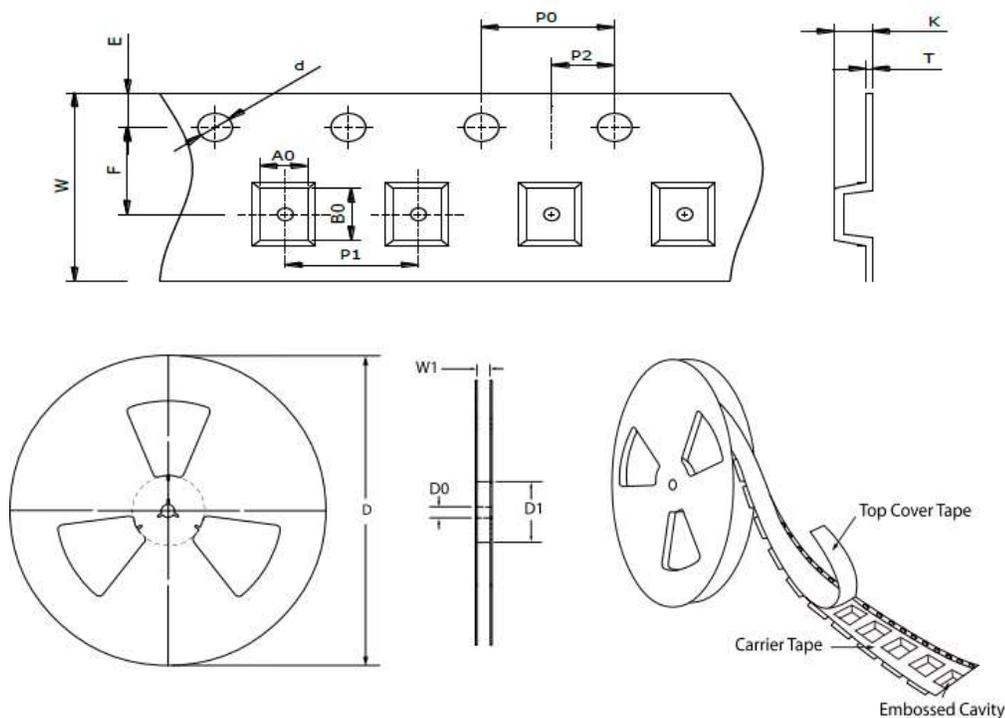
Fig. 4-Junction Capacitance vs. Reverse Voltage



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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	W ₁	8.40 ± 1.50

ORDER INFORMATION

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

MARKING CODE

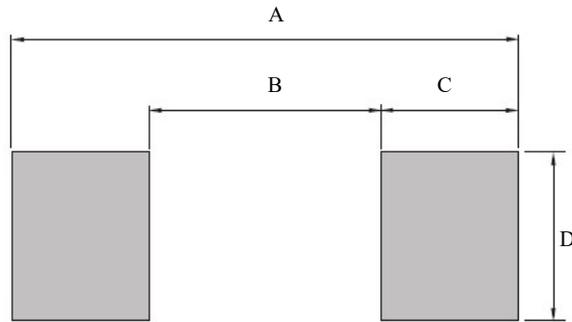
Part Number	Marking Code
SE24Q2BDDAH	E4



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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