



SE05L4BDDDBH

ESD PROTECTION DIODE

FEATURES

- Low Capacitance
- Low Leakage Current
- Suffix " H " indicated Halogen-free part, ex.SE05L4BDDDBH

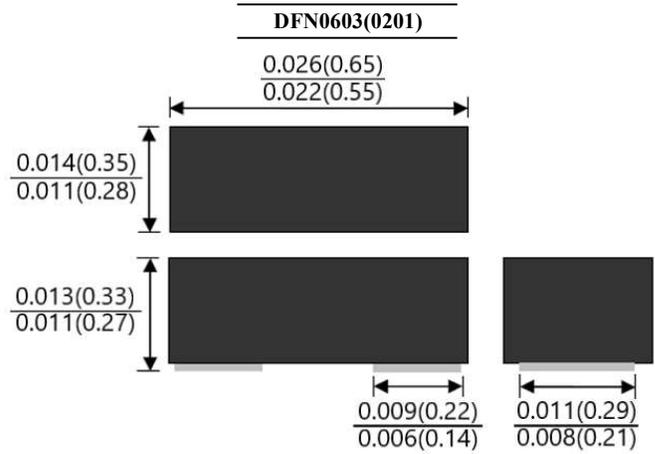
APPLICATIONS

- Cellular handsets and accessories
- Portable instrumentation
- Peripherals
- Notebooks, Desktops, Servers

MECHANICAL DATA

Case : DFN0603(0201)

PIN CONFIGURATION



Dimensions in inches and (millimeters)

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

Parameter	Symbol	Value	Units
Peak Pulse Current (tp = 8/20µs)	P _{PK}	60	W
Peak Pulse Current (tp = 8/20µs)	I _{PP}	3	A
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±15	kV
ESD per IEC 61000-4-2 (Contact)		±12	
Operating Junction Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C



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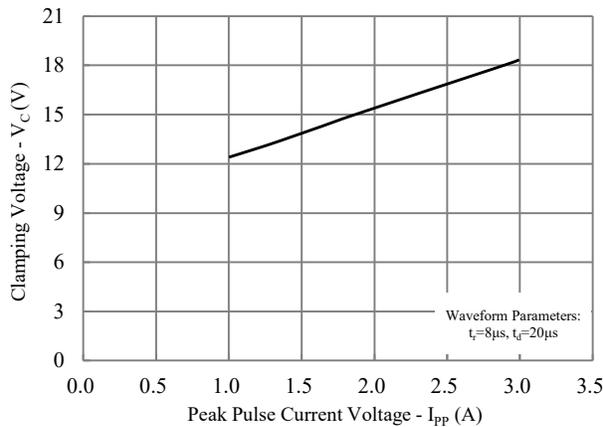
Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified)

Parameter	Test Condition	Symbol	Min	Typ	Max	Units
Reverse Stand-Off Voltage	-	V_{RWM}	-	-	5	V
Reverse Breakdown Voltage	$I_T=1\text{mA}$	V_{BR}	7	-	11	V
Reverse Leakage Current	$V_{RWM}=5\text{V}$	I_R	-	-	20	nA
Clamping Voltage	$I_{pp}=4\text{A}$, $t_p=0.2/100\text{ns}$ (Note 1)	V_C	-	13.0	-	V
	$I_{pp}=16\text{A}$, $t_p=0.2/100\text{ns}$ (Note 1)		-	21.0	-	
	$I_{pp}=1\text{A}$, $t_p=8/20\mu\text{s}$		-	-	15.0	
	$I_{pp}=3\text{A}$, $t_p=8/20\mu\text{s}$		-	-	20.0	
Diode Capacitance	$V_R=0\text{V}$, $f=1\text{MHz}$	C_J	-	-	0.4	pF

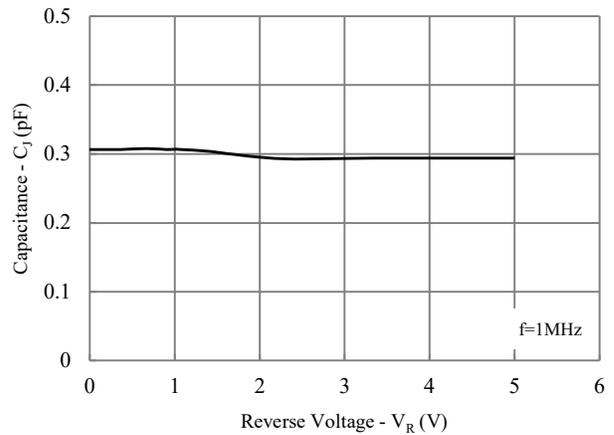
Note :

1. Transmission Line Pulse Test (TLP) Settings: $t_p=100\text{ns}$, $t_r=0.2\text{ ns}$, I_{TLP} and V_{TLP} averaging window: $t_1=70\text{ns}$ to $t_2=90\text{ns}$.

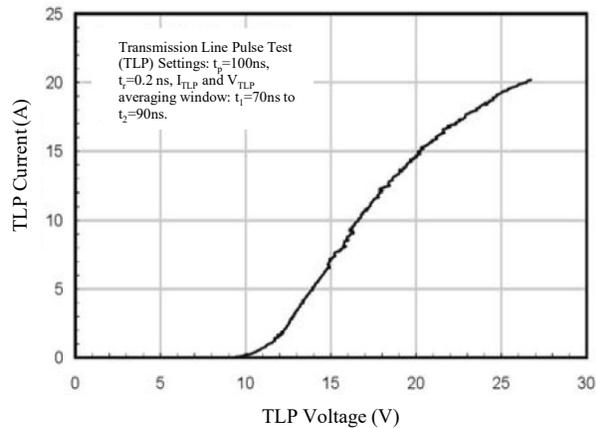
RATINGS AND CHARACTERISTIC CURVES



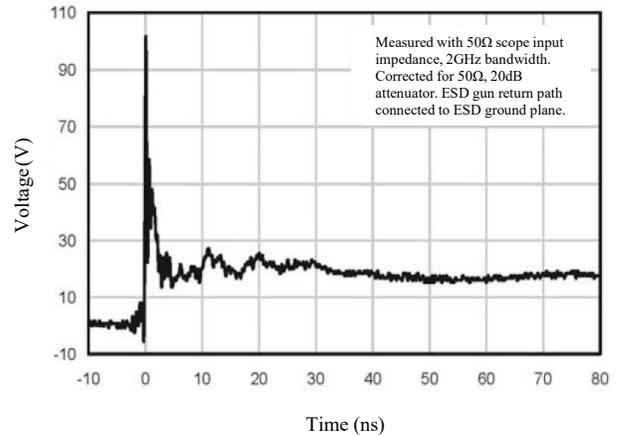
Clamping Voltage VS. Peak Pulse Current Voltage



Junction Capacitance VS. Reverse Voltage



TLP Characteristic

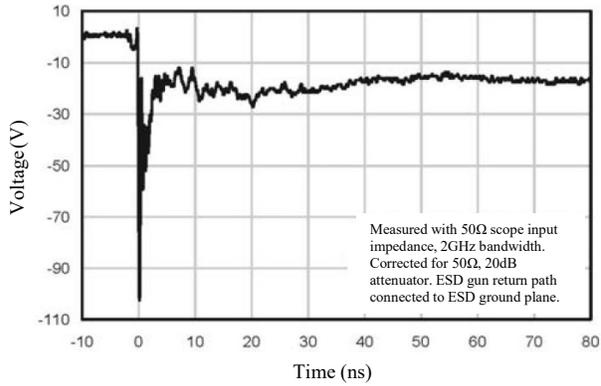


**ESD Clamping
(+8kV Contact per IEC 61000-4-2)**



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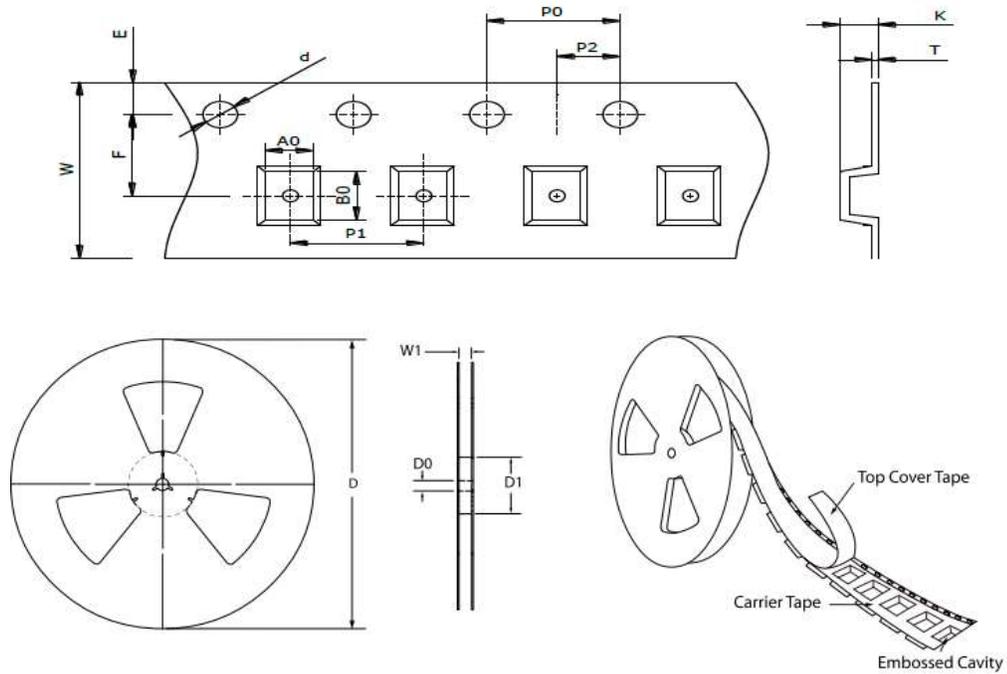
ESD Clamping
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TAPE & REEL SPECIFICATION



Item	Symbol	DFN0603(0201)
Carrier width	A ₀	0.50 ± 0.10
Carrier length	B ₀	0.80 ± 0.10
Carrier depth	K	0.55 ± 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
DFN0603(0201)	7"	10,000

MARKING CODE

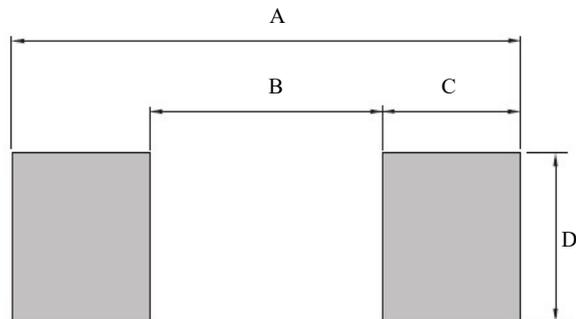
Part Number	Marking Code
SE05L4BDDDBH	1R



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SUGGESTED SOLDER PAD LAYOUT



Unit:mm

PACKAGE	A	B	C	D
DFN0603 (0201)	0.675	0.175	0.25	0.27