

FEATURES

- | 110W Peak Pulse Power per Line (tp=8/20μs)
- | Protects Four High Speed I/O Lines
- | Low Clamping Voltage

APPLICATIONS

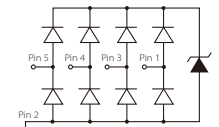
- | Digital Visual Interface
- | USB Ports
- | PCI Express
- | Serial ATA
- | Firewire Ports
- | GaAs Photodetector Protection
- | HBT Power Amp Protection
- | Infiniband Transceiver Protection



DFN2010P5

UL1A

Marking



Schematic Symbol

IEC COMPATIBILITY

- | IEC61000-4-2 (ESD) ±17kV (air), ±15kV (contact)
- | IEC61000-4-4 (EFT) 40A (5/50ns)

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

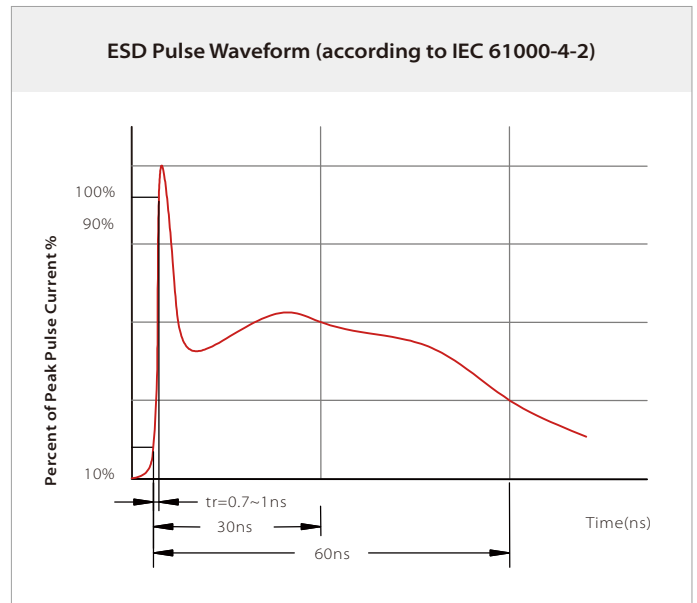
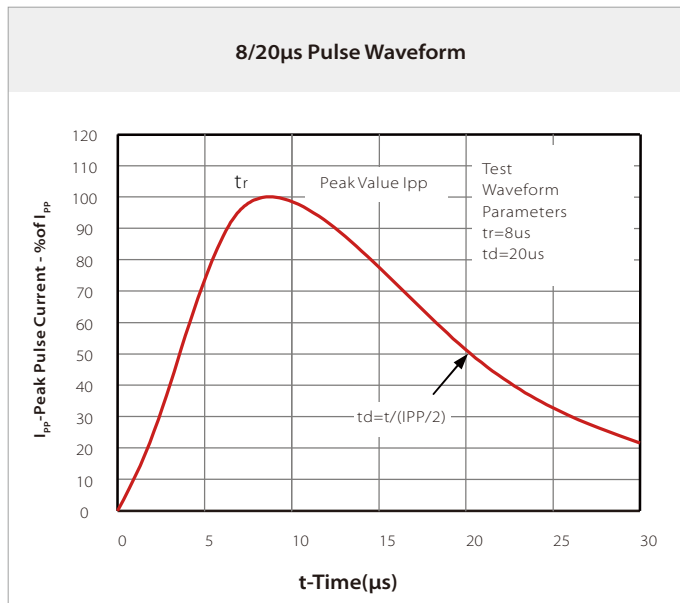
THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
P_{PP}	Peak Pulse Power (tp=8/20μs waveform)	110	Watts
T_J	Operating Temperature Range	-40 to +125	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

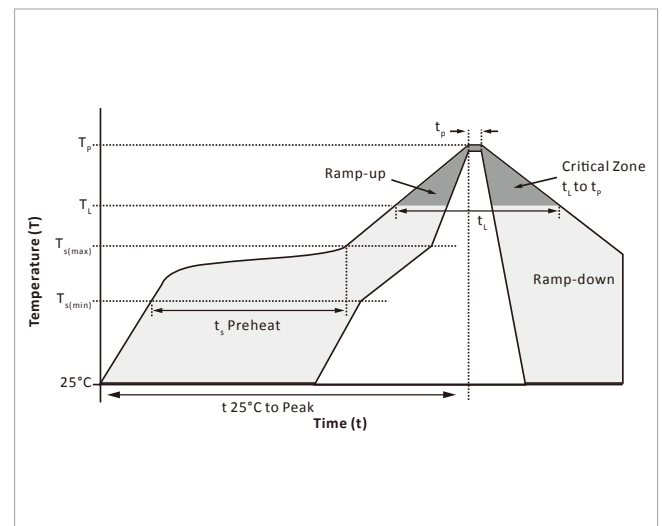
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				5	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1mA$	6			V
I_R	Reverse Leakage Current	$V_{RWM}=5V$			0.1	μA
V_C	Clamping Voltage (Tp=8/20us)	$I_{pp}=1A, tp=8/20us$			12	V
V_C	Clamping Voltage (Tp=8/20us)	$I_{pp}=3A, tp=8/20us$			20	V
V_C	Clamping Voltage (Tp=8/20us)	$I_{pp}=4.5A, tp=8/20us$			25	V
I_{pp}	Peak Pulse Current (Tp=8/20us)	tp=8/20us			4.5	A
C_J	Off State Junction Capacitance	$V_R=0V, f=1MHz$		0.5		pF

CHARACTERISTIC CURVES

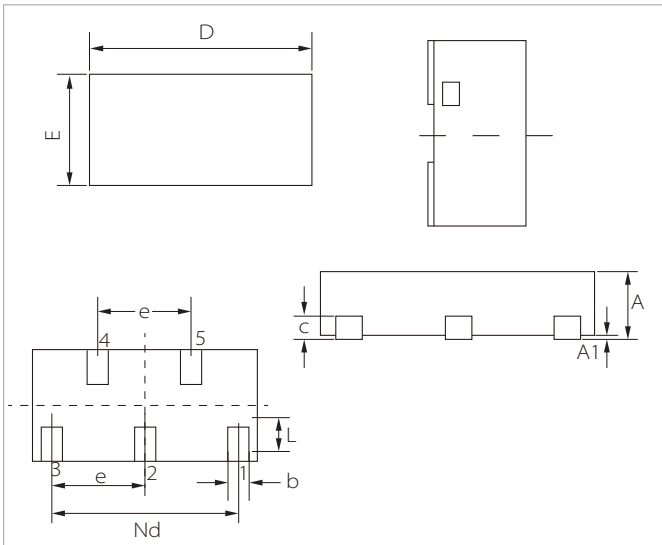


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

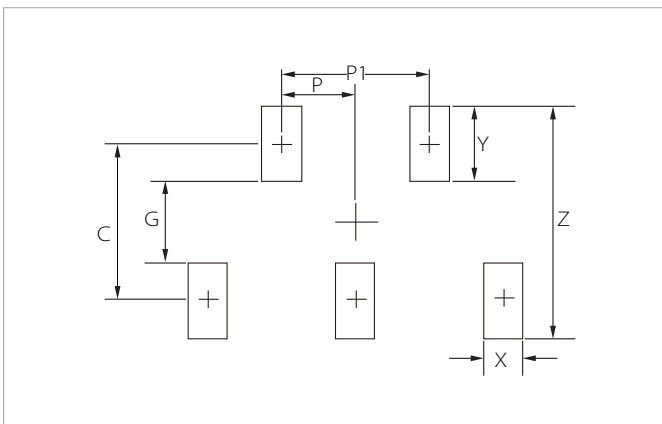


DFN2010P5 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.45	0.55	0.018	0.022
A1	0.00	0.05	0.000	0.002
b	0.15	0.25	0.006	0.010
c	0.152REF		0.006REF	
D	1.95	2.05	0.077	0.081
Nd	1.60BSC		0.063BSC	
e	0.80BSC		0.031BSC	
E	0.95	1.05	0.037	0.041
L	0.30	0.40	0.012	0.016

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
C	0.85	0.033
G	0.25	0.010
P	0.40	0.016
P1	0.80	0.031
X	0.20	0.008
Y	0.60	0.024
Z	1.45	0.057

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SEULC7534P5	DFN2010P5	3000PCS	7"

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