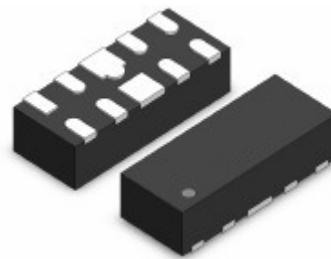


Features

- ◆ Up to 4 lines protects
- ◆ Ultra low junction capacitance (Max value: 0.5pF)
- ◆ Peak Pulse Current (8/20μs) MAX : 3A
- ◆ Low clamping voltage
- ◆ Low leakage current
- ◆ Working voltages:5V
- ◆ RoHS Compliant



DFN2510-10L

IEC COMPATIBILITY (EN61000-4)

- ◆ IEC 61000-4-2 ±8kV contact ±15kV
- ◆ air IEC 61000-4-4 (EFT) 40A (5/50ns)
- ◆ IEC 61000-4-5 (Lightning) 3A (8/20μs)

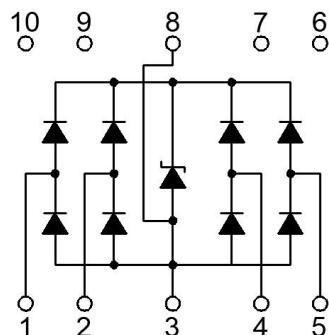
Applications

- ◆ Cellular Handsets and Accessories
- ◆ Personal Digital Assistants
- ◆ Notebooks and Handhelds
- ◆ Portable Instrumentation,Digital Cameras
- ◆ Peripherals, Audio Players, Industrial Equipment
- ◆ Automotive

Mechanical Characteristics

- ◆ Package: DFN2510-10L
- ◆ Lead Finish: Matte Tin
- ◆ Case Material: "Green" Molding Compound.
- ◆ UL Flammability Classification Rating94V-0
- ◆ Moisture Sensitivity: Level 3 per J-STD-020
- ◆ Tape Reel :3000pcs

Schematic & PIN Configuration



DFN2510-10L

Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PPP}	39	Watts
Peak Pulse Current ($t_p = 8/20\mu s$) (note1)	I_{PP}	3	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	± 15 ± 8	kV
Operating Temperature Range	T_J	-55 to + 125	°C
Storage Temperature Range	T_{stg}	-55 to + 125	°C

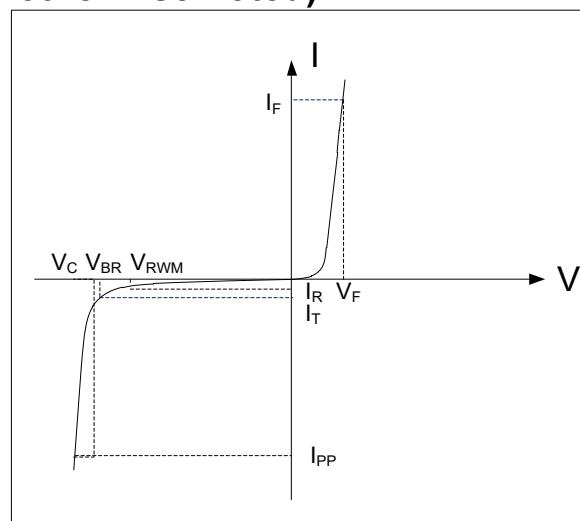
Electrical Characteristics (TA = 25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{PT}	$I_T = 1mA$	6		9	V
Reverse Leakage Current	I_R	$V_{RWM} = 5 V$			0.5	μA
Clamping Voltage	V_C	$I_{PP} = 1A$ (8 x 20μs pulse), any I/O pin to ground			10	V
Clamping Voltage	V_C	$I_{PP} = 3A$ (8 x 20μs pulse), any I/O pin to ground			13	V
Junction Capacitance	C_J	$V_R = 1.5V$, $f = 1MHz$, between I/O pins		0.2	0.3	pF
Junction Capacitance	C_J	$V_R = 1.5V$, $f = 1MHz$, any I/O pin to ground			0.5	pF

Electrical Parameters (TA = 25°C unless otherwise noted)

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current

Note: 8/20μs pulse waveform.



Typical Characteristics

FIG1: Power rating derating curve

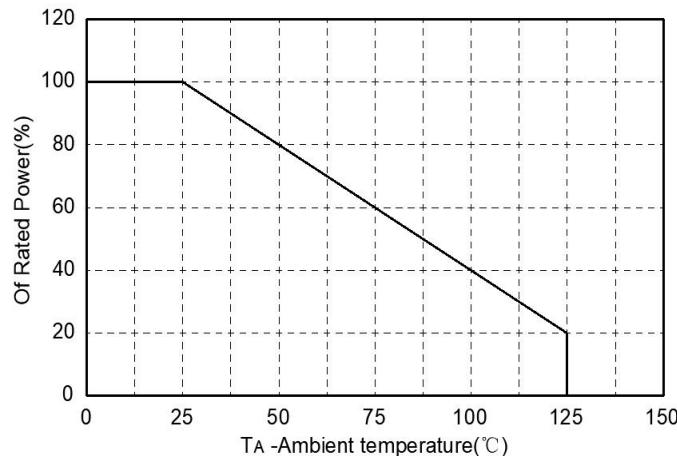


FIG2: pulse Waveform

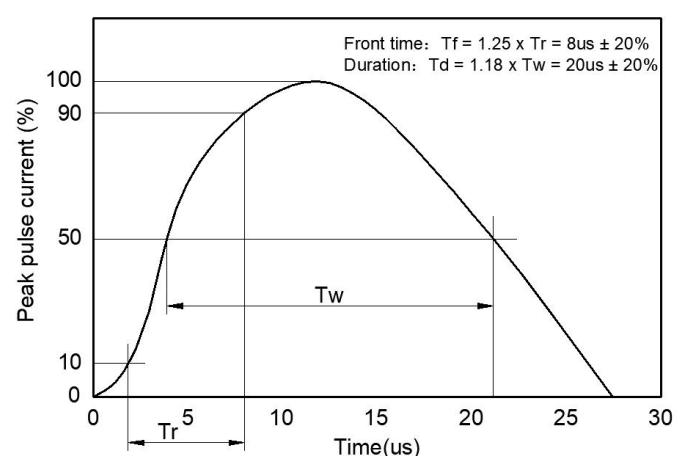


FIG3: Capacitance between terminals characteristics

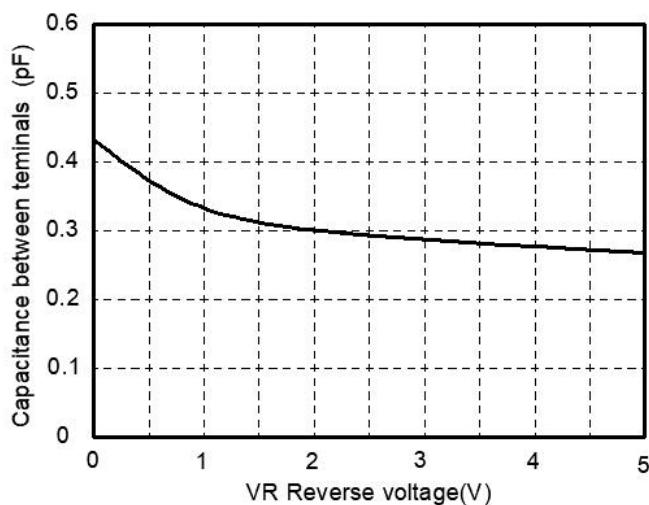
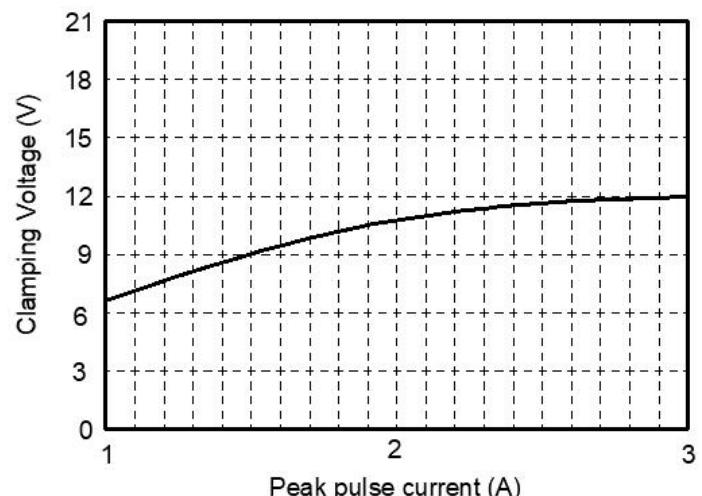
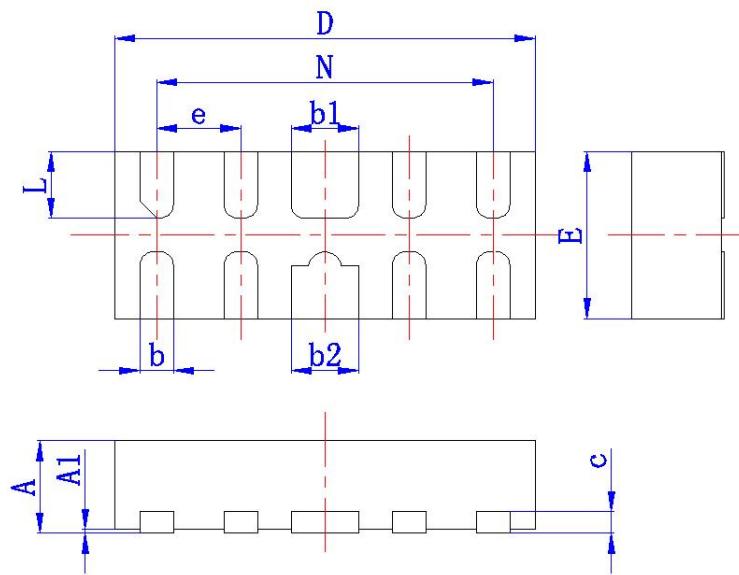


Figure 4: Clamping Voltage vs. Peak Pulse Current

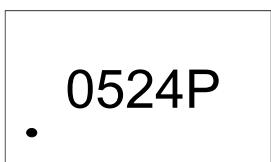


Outline Drawing – DFN2510-10L



Symbol	Dimension in Millimeters	
	min	max
A	0.5	0.65
A1	0	0.05
D	2.4	2.6
E	0.9	1.1
e	(0.5)	
N	(2.0)	
b	0.15	0.25
b1	0.35	0.5
b2	0.35	0.5
L	0.35	0.45

Marking



0524P=Marking Code
• = Pin1 Logo

Ordering information

Order code	Package	Base qty	Delivery mode
PTN2510L05S5CA3	DFN2510-10L	3k	Tape and reel