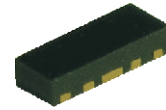


## CPDVR105V0USP-HF

RoHS Device  
Halogen Free



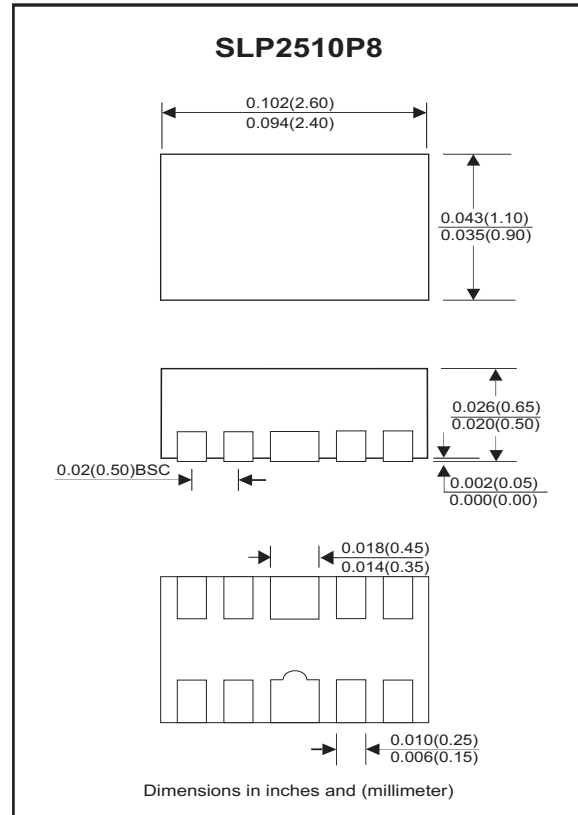
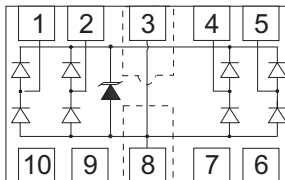
### Features

- IEC61000-4-2 Level 4 ESD Protection.
- IEC61000-4-4 Level 4 FET protection.
- Protects four high speed I/O lines
- Low clamping voltage
- Working Voltage: 5V
- Low leakage current

### Mechanical data

- Case: SLP2510P8 small outline plastic package
- Terminals: Matte tin plated, solderable per MIL-STD-202,method 208
- Mounting Compound Flammability Rating: UL 94V-0
- High temperature soldering guaranteed:  
260°C/10 second
- Weight: 0.015 grams(approx.).

### Circuit Diagram



### Electrical Characteristics (at TA=25 °C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse working voltage	I/O Pins to GND (Note 1)	V <sub>RWM</sub>			5.0	V
Breakdown voltage	I <sub>T</sub> = 1mA, I/O Pin to GND	V <sub>(BR)</sub>	6.0			V
Reverse Leakage current	V <sub>RWM</sub> = 5V, I/O Pin to GND	I <sub>R</sub>			1.0	uA
Junction capacitance	V <sub>R</sub> = 0V, f = 1MHz between I/Os	C <sub>J</sub>			0.4	pF
Junction capacitance	V <sub>R</sub> = 0V, f = 1MHz between I/Os GND	C <sub>J</sub>			0.8	pF
ESD capability	IEC 61000-4-2(Air)	V <sub>ESD</sub>			±15	kV
	IEC 61000-4-2(Contact)	V <sub>ESD</sub>			±8	kV
Clamping voltage	I <sub>PP</sub> = 1A, I/O Pin to GND(8/20μs)	V <sub>C</sub>			15	V
Peak pulse power	T <sub>p</sub> =8/20μs waveform	P <sub>PP</sub>			150	W
Junction temperature range		T <sub>J</sub>	-55		150	°C
Storage temperature range		T <sub>STG</sub>	-55		150	°C

Note: 1. ESD devices are normally selected according to the working peak reverse voltage (V<sub>RWM</sub>), which should be equal or greater than the DC or continuous peak operating voltage level.

Company reserves the right to improve product design , functions and reliability without notice.

## RATING AND CHARACTERISTIC CURVES (CPDVR105V0USP-HF)

Fig.1- Non-Repetitive Peak Pulse Power vs. Pulse Time

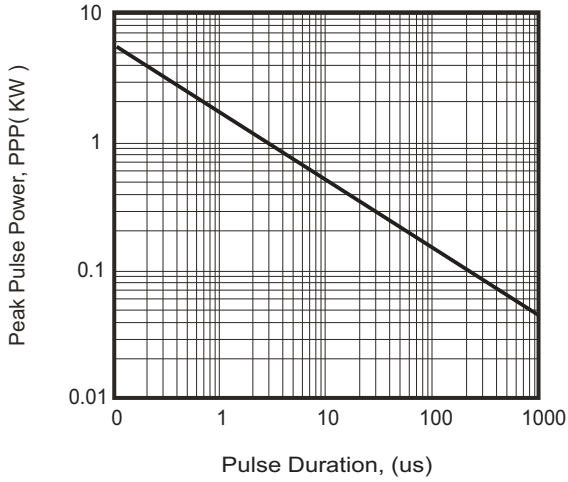


Fig.2- Clamping Voltage vs. Peak Pulse Current

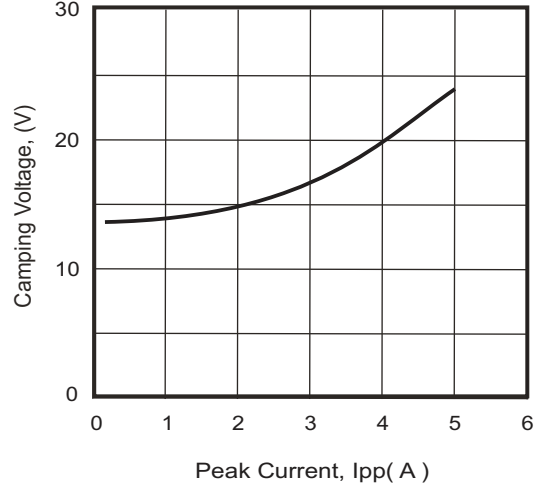


Fig.3- Admissible Power Dissipation Curve

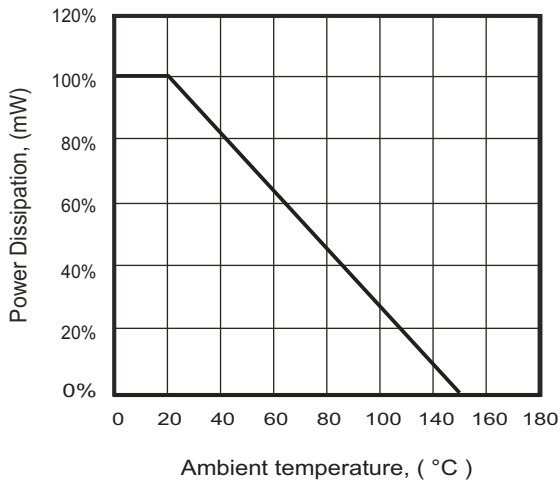
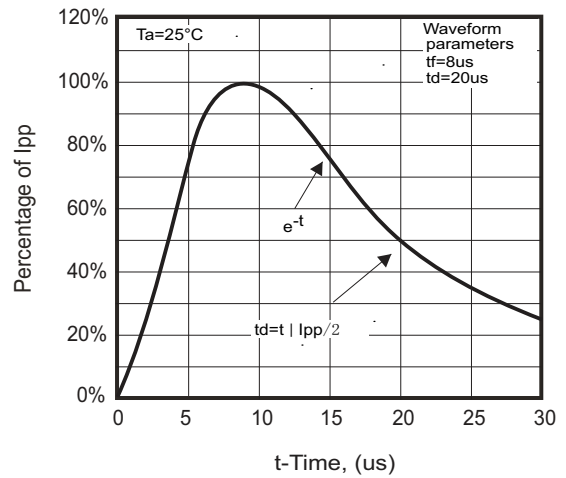
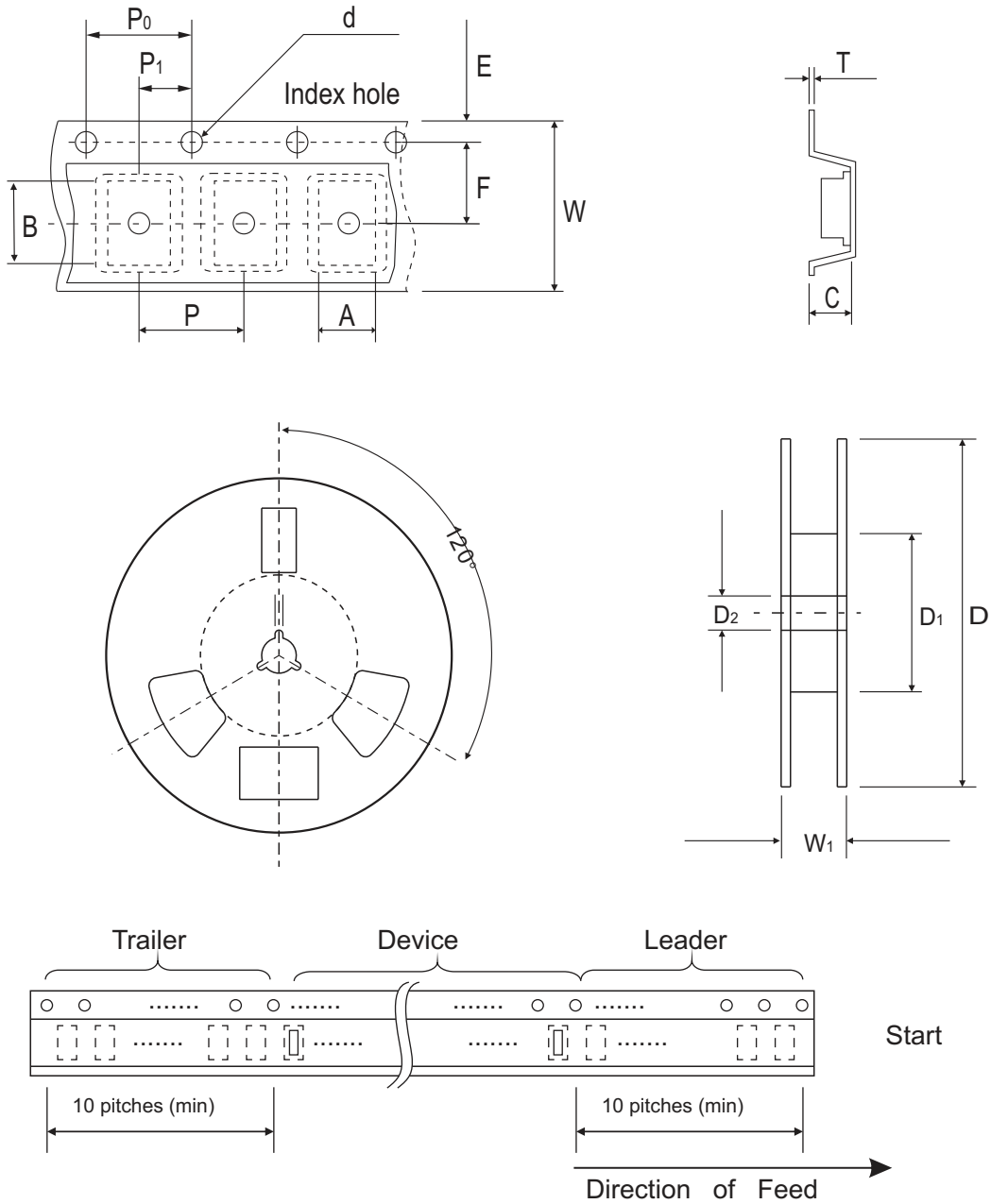


Fig.4- Pulse Waveform



## Reel Taping Specification



SLP2510P8	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	1.23 ± 0.10	2.77 ± 0.10	0.70 ± 0.10	1.50 ± 0.10	178 ± 1	54.4 ± 0.40	13.0 ± 0.20
	(inch)	0.048 ± 0.004	0.109 ± 0.004	0.028 ± 0.004	0.059 ± 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

SLP2510P8	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.229 ± 0.013	8.10 ± 0.20	12.3 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.009 ± 0.001	0.319 ± 0.008	0.484 ± 0.008

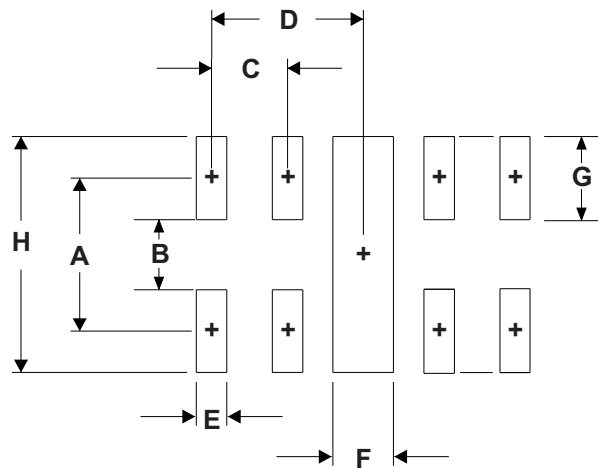
## Marking Code

Part Number	Marking Code
CPDVR105V0USP-HF	P524



## Suggested PAD Layout

SIZE	SLP2510P8	
	(mm)	(inch)
A	0.875	0.034
B	0.200	0.008
C	0.500	0.020
D	1.000	0.039
E	0.200	0.008
F	0.400	0.016
G	0.675	0.027
H	1.550	0.061



## Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
SLP2510P8	3,000	7