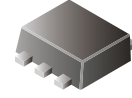


CPDH6-5V0U-A1HF

RoHS Device
Halogen Free

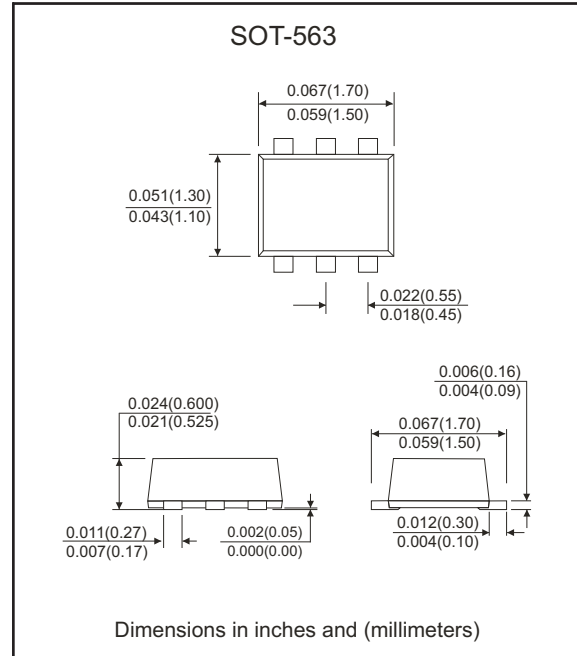


Features

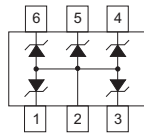
- Uni-directional ESD protection of five lines
- IEC61000-4-2 Level 3 ESD protection
- Surface mount package.
- Low capacitance: 10 pF(Typ.)
- Low reverse clamping voltage.
- Low leakage current.

Mechanical data

- Case: SOT-563 Standard package, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Mounting position: Any.
- Weight: 0.0034 grams(approx.).



Circuit diagram



Maximum Rating (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Value	Unit
Peak pulse power	$T_P = 8/20\mu s$	P_{PP}	26	W
Peak pulse current	$T_P = 8/20\mu s$	I_{PP}	2	A
ESD capability	IEC 61000-4-2(air)	V_{ESD}	±8	kV
	IEC 61000-4-2(contact)		±6	
Junction temperature		T_j	150	°C
Storage temperature range		T_{STG}	-55~+150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand off voltage		V_{RWM}			5	V
Forward voltage	$I_F = 10mA$	V_F			0.9	V
Breakdown voltage	$I_T = 1mA$	V_{BR}	6.2		7.2	V
Reverse leakage current	$V_{RWM} = 5V$	I_R			1.0	μA
Clamping voltage (Note)	$I_{PP} = 2A, T_P = 8/20\mu s$	V_C			13	V
Junction capacitance	$V_R = 0V, f = 1MHz$	C_J		10	12	pF

Notes: Non-repetitive current pulse 8/20μs exponential decay waveform according to IEC61000-4-5

RATING AND CHARACTERISTIC CURVES (CPDH6-5V0U-A1HF)

Fig.1 - 8/20us Peak Pulse Current Waveform Acc. IEC61000-4-5

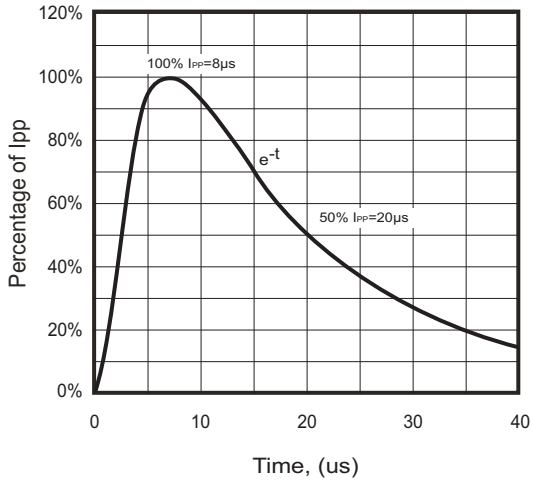


Fig.2 - Instantaneous Forward Characteristics

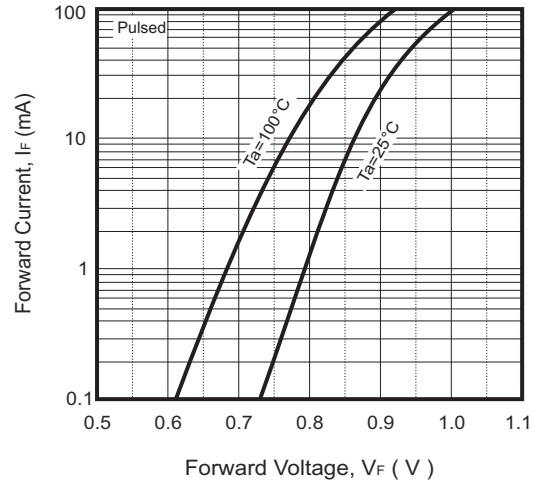


Fig.3 - Clamping Voltage vs. Peak Pulse Current

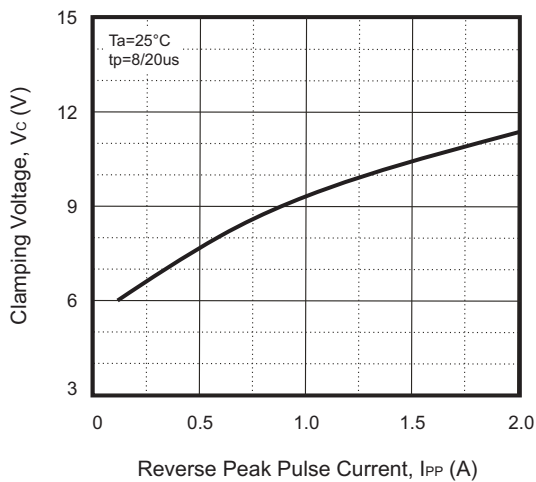
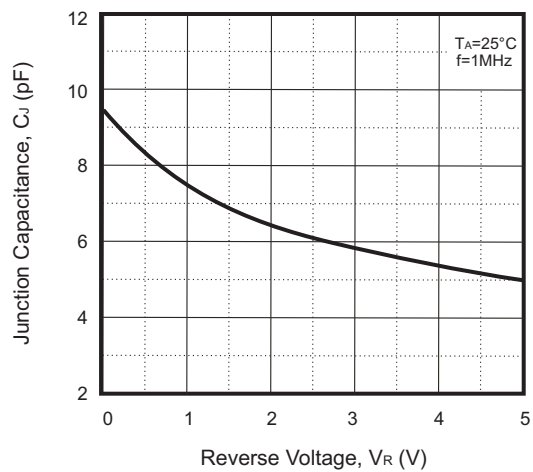
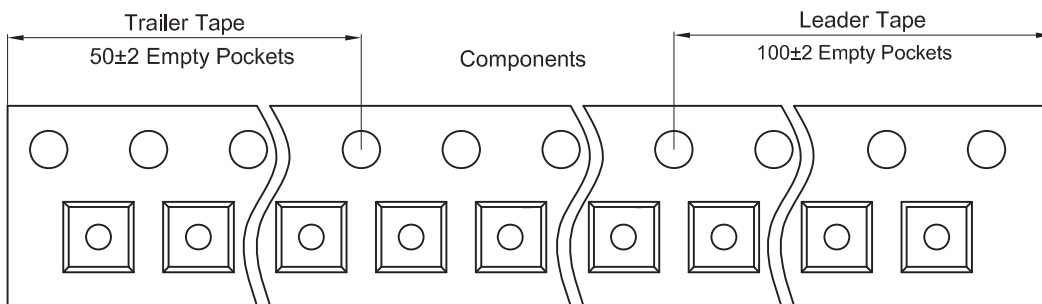
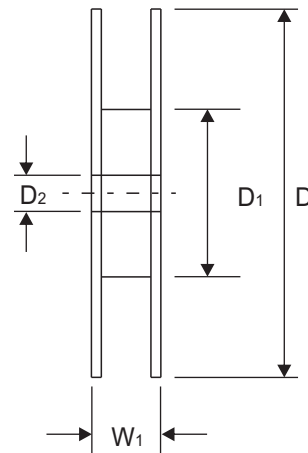
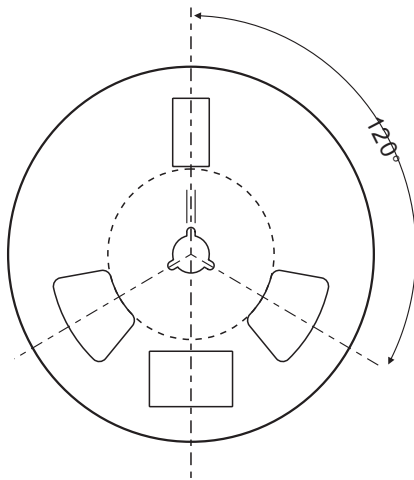
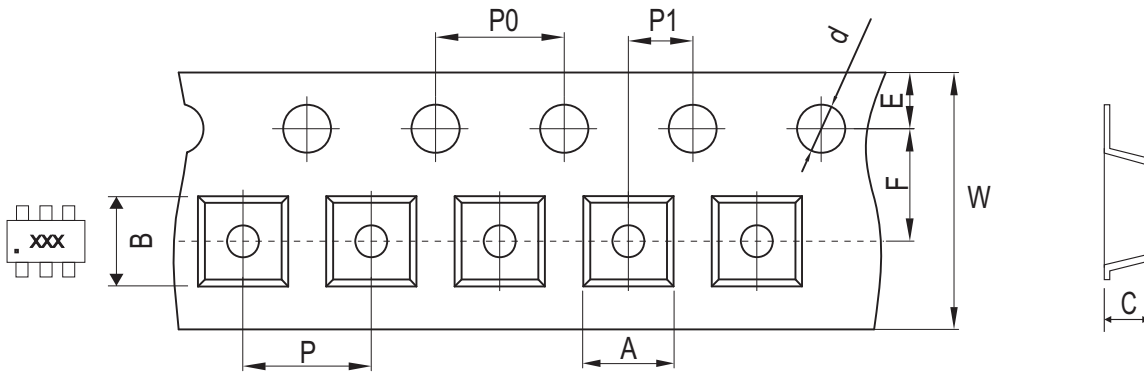


Fig.4 - Capacitance Characteristics



Reel Taping Specification

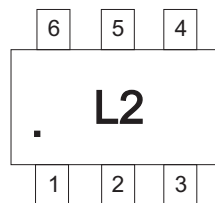


SOT-563	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	1.78 ± 0.10	1.78 ± 0.10	0.69 ± 0.10	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.070 ± 0.004	0.070 ± 0.004	0.027 ± 0.004	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

SOT-563	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 ± 0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 ± 0.004	0.567 ± 0.039

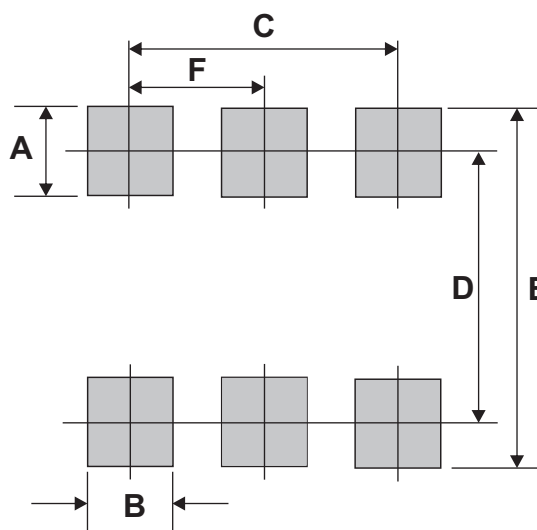
Marking Code

Part Number	Marking Code
CPDH6-5V0U-A1HF	L2



Suggested PAD Layout

SIZE	SOT-563	
	(mm)	(inch)
A	0.30	0.012
B	0.30	0.012
C	1.00	0.039
D	1.40	0.055
E	1.70	0.067
F	0.50	0.020



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-563	3,000	7