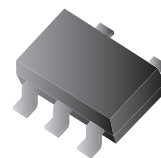


CPDT5-5V0-HF

RoHS Device
Halogen Free

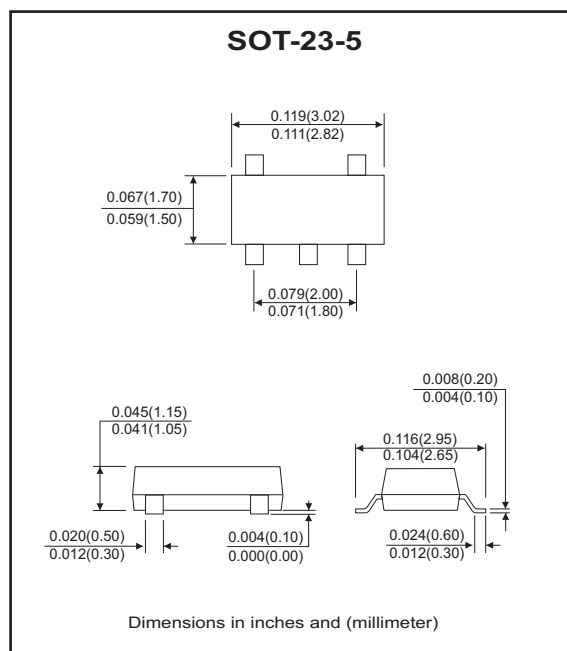


Features

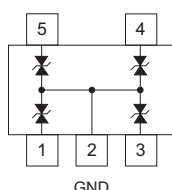
- Common anode ESD protection.
- IEC61000-4-2 Level 4 ESD protection.
- Low operating voltage: < 5V.
- Fast turn-on and low clamping voltage

Mechanical data

- Case: SOT-23-5 Standard package, molded plastic.
- Terminals: Tin plated, solderable per MIL-STD-750, method 2026.
- Mounting position: Any.
- Weight: 0.0153 gram(approx.).



Circuit Diagram



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Diode breakdown voltage	I _R = 1mA	V _{BD}	5.1	7.0		V
Leakage current	V _R = 5V	I _L		0.1	2.0	uA
Junction capacitance	V _R = 0V, f = 1MHz	C _T		15	20	pF
ESD capability	IEC 61000-4-2(air) IEC 61000-4-2(contact)	ESD			16 8	kV
Clamping voltage	I _{PP} = 5A, T _P =8/20us	V _C			15	V
Peak pulse power	T _P =8/20us	P _{PP}			75	W
Operation temperature		T _J			125	°C
Storage temperature		T _{STG}	-55		150	°C

RATING AND CHARACTERISTIC CURVES (CPDT5-5V0-HF)

Fig. 1 - 8/20us Peak pulse current waveform acc. IEC 61000-4-5

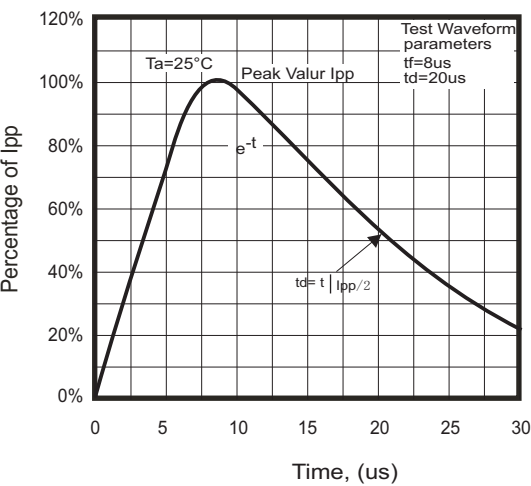


Fig. 2 - Reverse characteristics

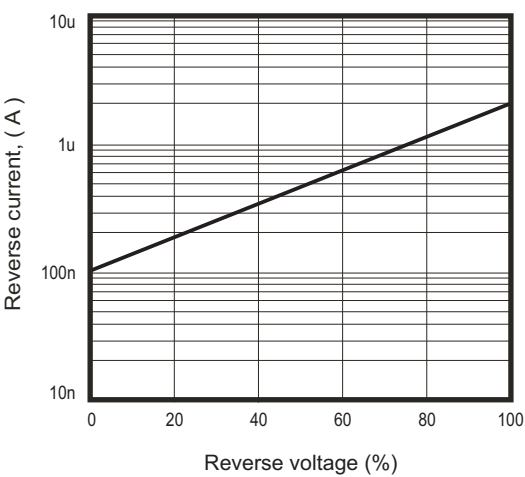


Fig.3 - Capacitance between terminals characteristics

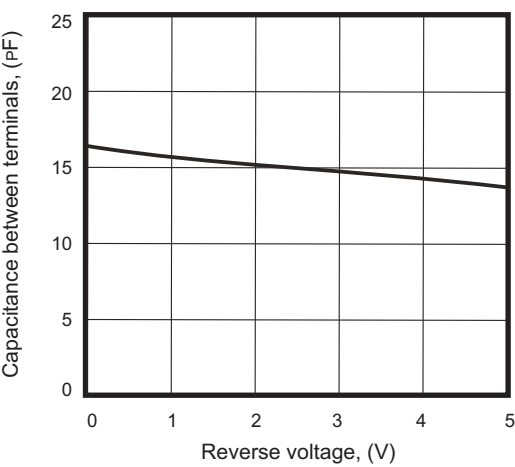
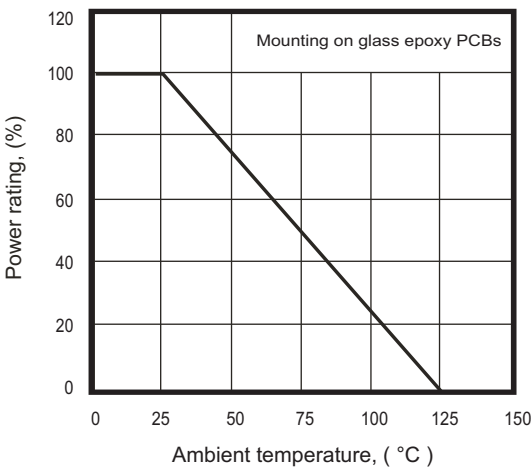
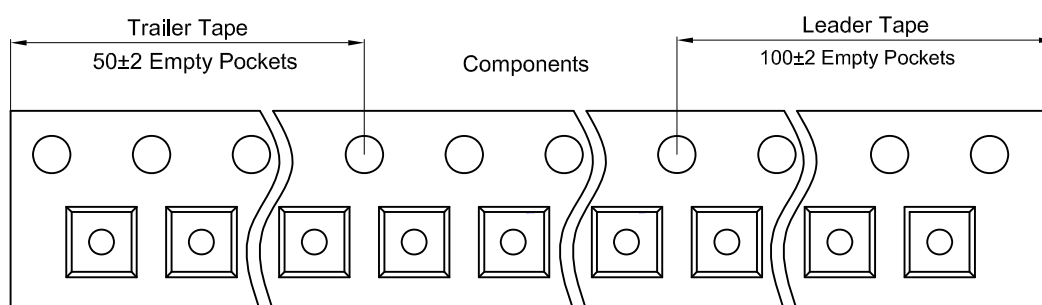
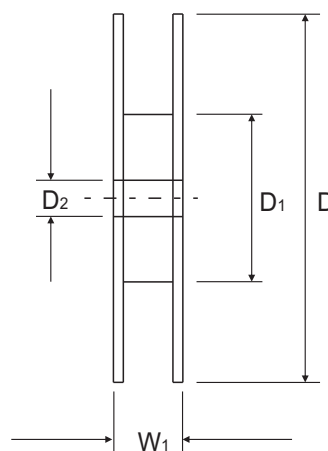
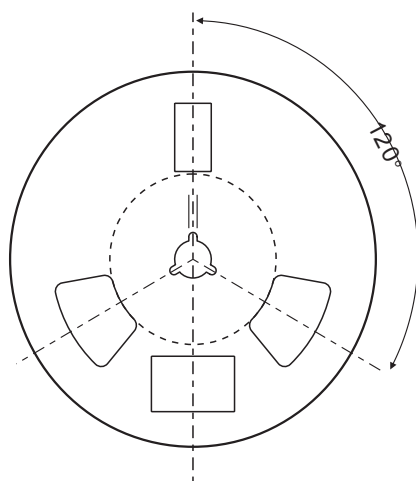
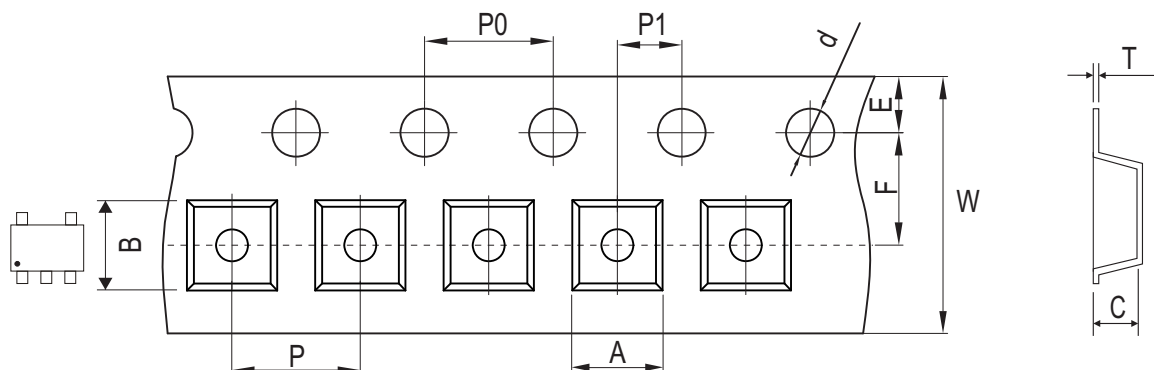


Fig.4 - Power rating derating curve



Reel Taping Specification



SOT-23-5	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.17 ± 0.10	3.23 ± 0.10	1.37 ± 0.10	1.50 ± 0.05	$180.0 + 0.00 / - 0.30$	60.00 ± 0.50	13.00 ± 0.20
	(inch)	0.125 ± 0.004	0.127 ± 0.004	0.054 ± 0.004	0.059 ± 0.002	$7.087 + 0.00 / - 0.012$	2.362 ± 0.020	0.512 ± 0.008

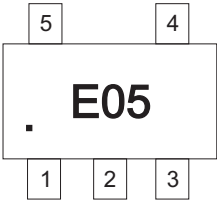
SOT-23-5	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	$8.00 + 0.30 / - 0.10$	12.30 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	$0.315 + 0.012 / - 0.004$	0.484 ± 0.008

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

REV:A

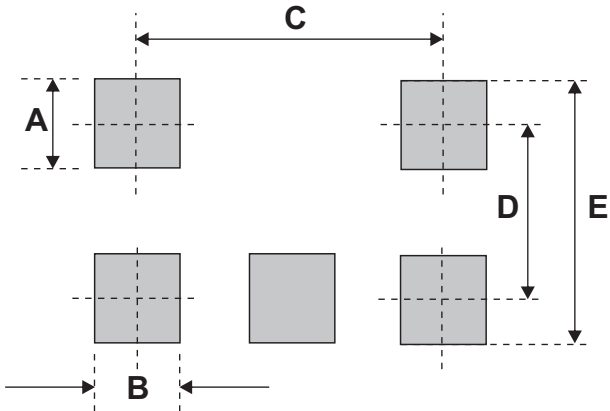
Marking Code

Part Number	Marking Code
CPDT5-5V0-HF	E05



Suggested PAD Layout

SIZE	SOT-23-5	
	(mm)	(inch)
A	1.10	0.043
B	0.60	0.024
C	1.90	0.075
D	2.50	0.098
E	3.60	0.142



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-23-5	3,000	7