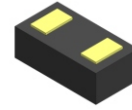


ACPDWLZ5V0HT-HF

RoHS Device
Halogen Free



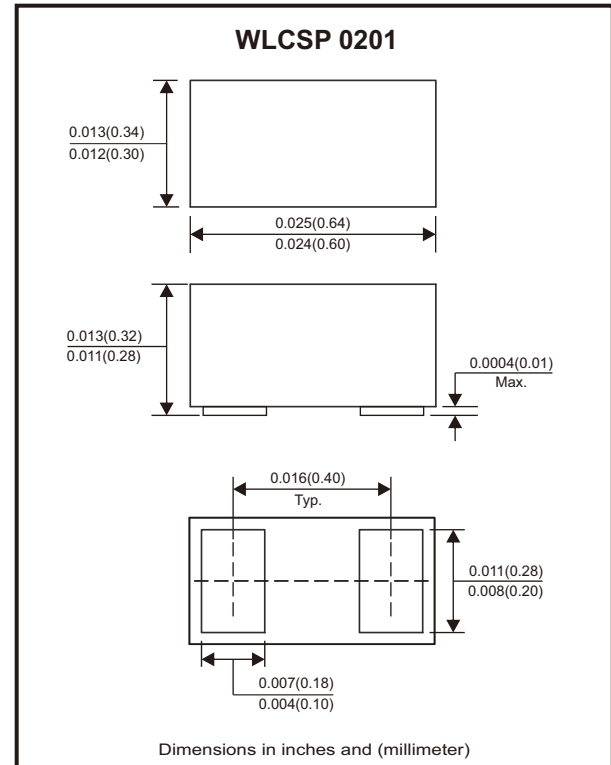
Features

- Bi-directional ESD protection.
- High ESD protection level.
- Surface mount package.
- High component density.
- Low clamping voltage.
- Low leakage.
- AEC-Q101 Qualified & PPAP.

Mechanical data

- Case: WLCSP 0201 package, molded plastic.
- Polarity: Indicated by cathode band.
- Mounting position: Any.

Circuit Diagram



Maximum Rating (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Value	Unit
Peak pulse power	$T_P = 8/20\mu\text{s}$	P_{PP}	198	W
Peak pulse current	$T_P = 8/20\mu\text{s}$	I_{PP}	22	A
ESD capability	IEC 61000-4-2(air) IEC 61000-4-2(contact)	ESD	± 30	kV
Operating temperature range		T_j	-55 to +125	$^\circ\text{C}$
Storage temperature range		T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Working peak reverse voltage		V_{RWM}			5	V
Breakdown voltage	$I_r = 1\text{mA}$	V_{BR}	6			V
Reverse leakage current	$V_{RWM} = 5\text{V}$	I_R			500	nA
Clamping voltage	$I_{PP} = 1\text{A}, T_P = 8/20\mu\text{s}$	V_C		4	6	V
	$I_{PP} = 22\text{A}, T_P = 8/20\mu\text{s}$			7	9	
Clamping voltage	$TLP = 16\text{A}, T_P = 100\text{ns}$	V_C		7.6		V
Junction capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$	C_J		25		pF

Typical Rating and Characteristic Curves (ACPDWLZ5V0HT-HF)

Fig.1 - 8/20 μ s Peak Pulse Current
Waveform Acc. IEC 61000-4-5

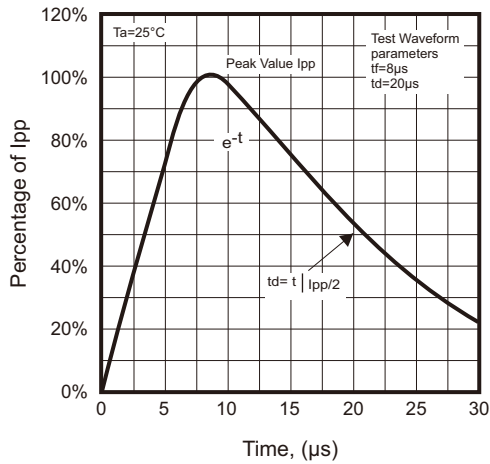


Fig.2 - Power Rating Derating Curve

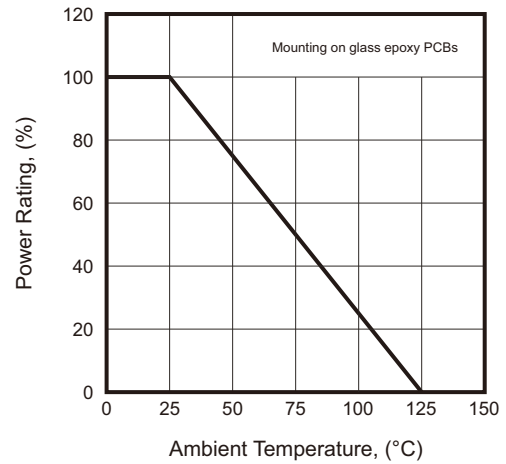


Fig.3 - Typical Clamping Voltage vs.
Peak Pulse Current

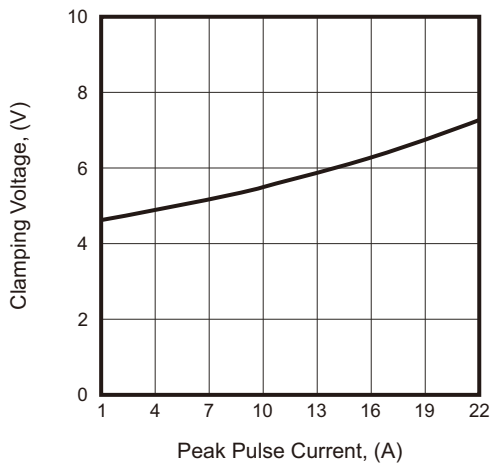


Fig.4 - Typical Capacitance Between
Terminals Characteristics

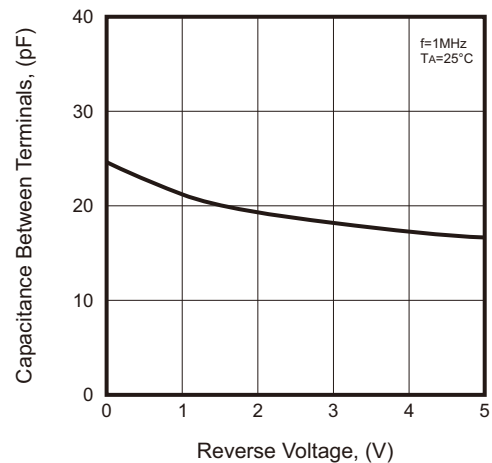


Fig.5 - TLP- Positive Pulse

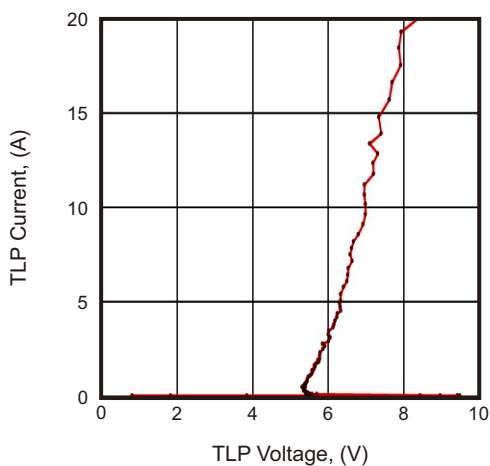
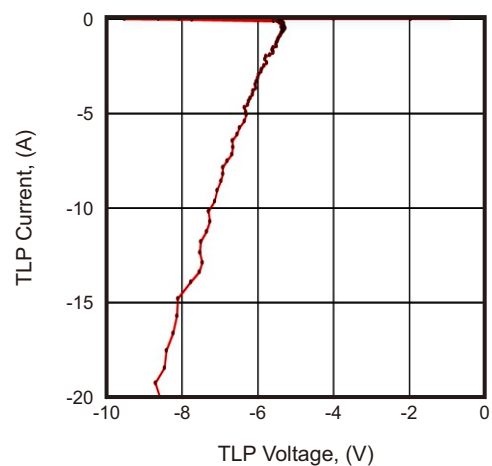
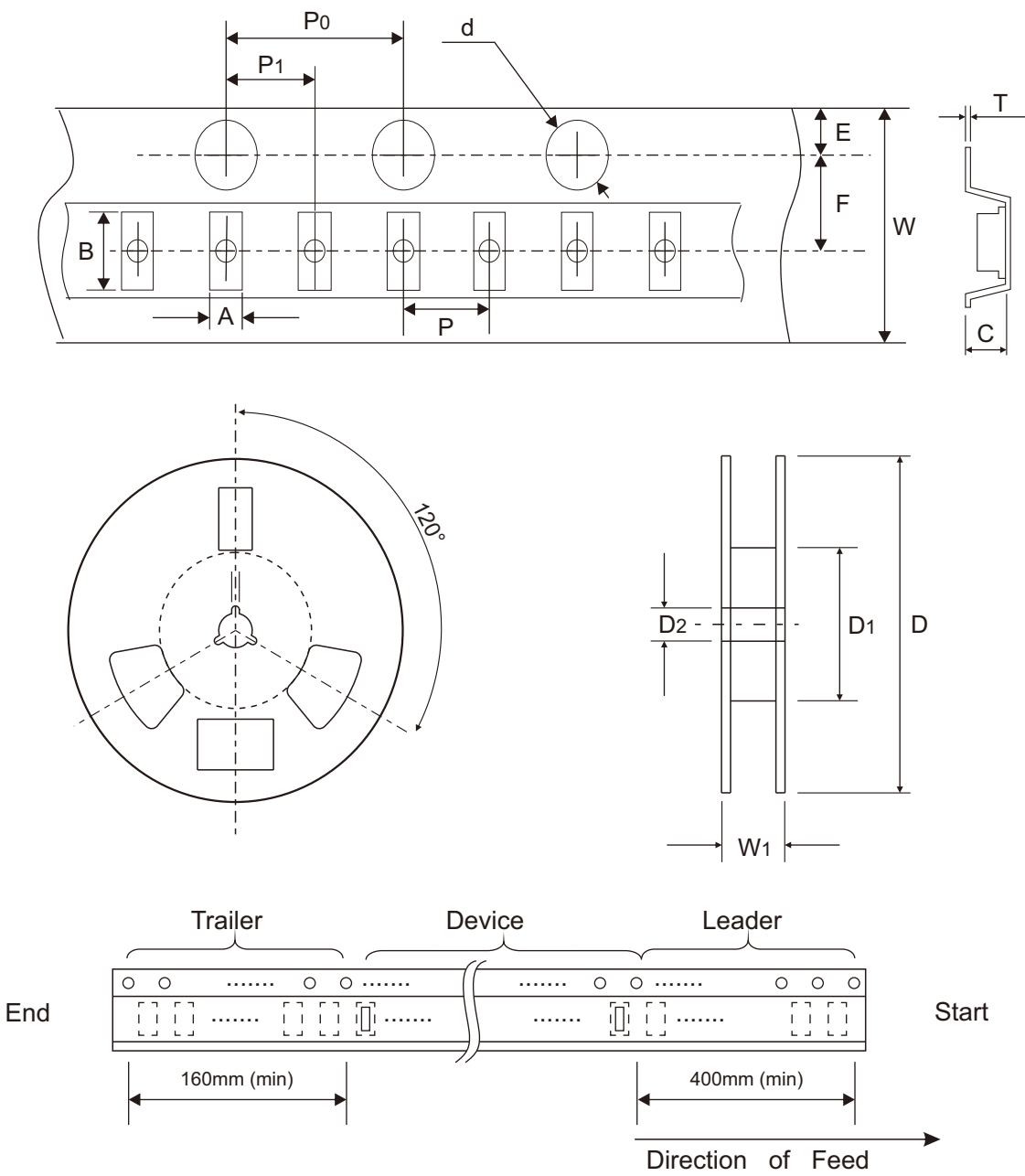


Fig.6 - TLP- Negative Pulse



Reel Taping Specification



WLCSP 0201	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.44 ± 0.03	0.74 ± 0.03	0.40 ± 0.03	$1.50 + 0.10 - 0.00$	178.00 ± 1.00	60.00 ± 0.50	13.50 ± 0.20
	(inch)	0.017 ± 0.001	0.029 ± 0.001	0.016 ± 0.001	$0.059 + 0.004 - 0.000$	7.008 ± 0.039	2.362 ± 0.020	0.531 ± 0.008

WLCSP 0201	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.03	$8.00 + 0.30 - 0.10$	$12.00 + 0.50 - 0.00$
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.001	$0.315 + 0.012 - 0.004$	$0.472 + 0.020 - 0.000$

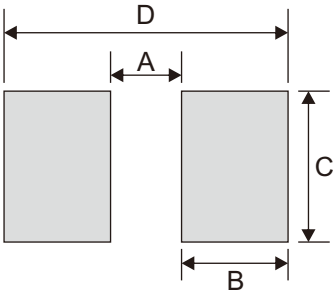
Marking Code

Part Number	Marking Code
ACPDWLZ5V0HT-HF	F



Suggested P.C.B. PAD Layout

Size	WLCSP 0201	
	(mm)	(inch)
A	0.16	0.006
B	0.24	0.009
C	0.34	0.013
D	0.64	0.025



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
WLCSP 0201	10,000	7