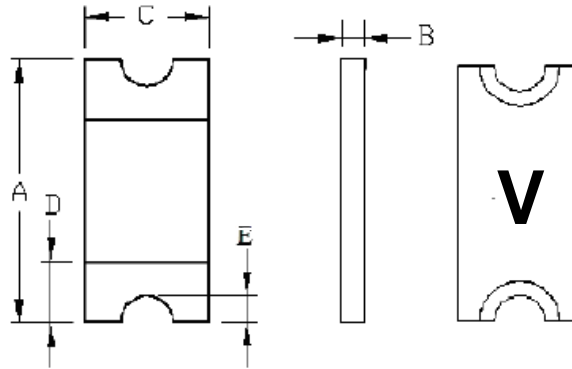


Specification Status: Preliminary

FEATURES:

- Designed for chargers with captive cables
- No IR loss contribution
- Full USB-PD capability
- Compact footprint



Marking: V

PRODUCT DIMENSIONS:

A		B		C		D		E
MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
2.00	2.20	0.35	0.60	1.30	1.50	0.25	0.75	0.076
(0.079)	(0.087)	(0.014)	(0.024)	(0.051)	(0.059)	(0.010)	(0.030)	(0.003)

mm:
in:

THERMAL PERFORMANCE RATINGS:

TRIP TEMPERATURE		RESISTANCE POST REFLOW	CURRENT LIMITS
T _{trip} * @35kΩ		R ₀ **	I _{hold}
°C		ohms@25°C	mA@55°C
MIN	MAX	MAX	MIN
90	110	6.0	1

* Temperature when device resistance increases to 35kΩ.

**Resistance is measured 1 hour after reflow.

ELECTRICAL PERFORMANCE RATINGS:

I _{hold} (A)	I _{trip} (A)	V _{max} (Vdc)	I _{max} (A)	P _d typ. (W)	Maximum Time to Trip		Resistance	
					Current (A)	Time (Sec.)	R _{min} (Ω)	R _{max} (Ω)
0.075	0.30	6	1	0.6	0.3	5	0.5	6

ENVIRONMENTAL SPECIFICATIONS:

Test Items	Method/Condition
Humidity Aging	60°C, 90% RH, 1000hrs
Passive Aging	-40°C, 1000hrs
Passive Aging	70°C, 1000hrs
Thermal Shock	-40°C to +85°C, 10Cycles
Vibration	MIL-STD-883, Method 2007, Condition A

Agency Recognition: UL, TUV
Reference Document: PS300
Precedence: This specification takes precedence over documents referenced herein.
Effectivity: Reference documents shall be the issue in effect on the date of invitation for bid.

MATERIALS INFORMATION

ROHS Compliant

Directive 2011/65/EU
Compliant

ELV Compliant

Directive 2000/53/EC
Compliant

Pb-Free



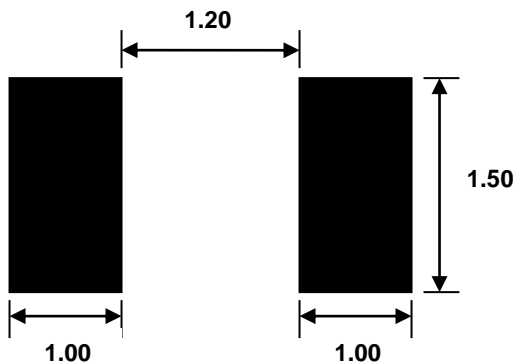
Halogen Free*



* Halogen Free refers to: Br≤900ppm, Cl≤900ppm, Br+Cl≤1500ppm.

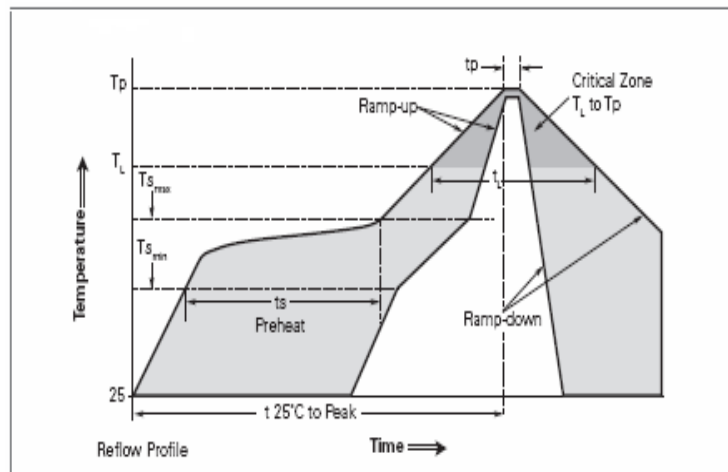
SOLDER REFLOW RECOMMENDATIONS:

Recommended pad layout (mm.)



Recommended reflow profile

Profile Feature	Pb-Free Assembly
Average ramp up rate (Ts_{max} to Tp)	3°C/s max.
Preheat	
• Temperature min. (Ts _{min})	150°C
• Temperature max. (Ts _{max})	200°C
• Time (ts _{min} to ts _{max})	60-120s
Time maintained above:	
• Temperature (T _L)	217°C
• Time (t _L)	60-150s
Peak/Classification temperature (Tp)	260°C
Time within 5°C of actual peak temperature (tp)	30s max.
Ramp down rate	2°C/s max.
Time 25°C to peak temperature	8 mins max.



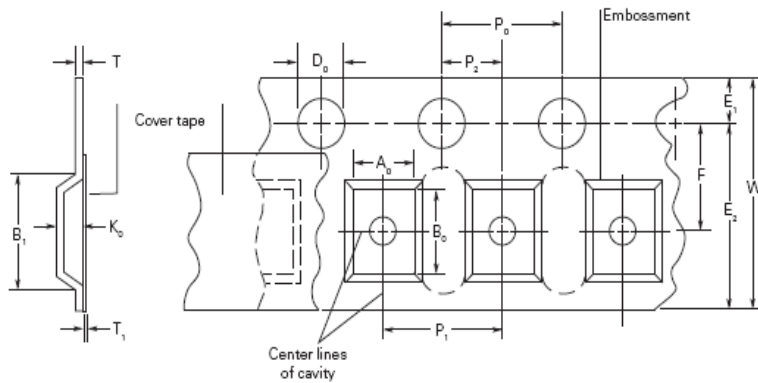
Notes:

- All temperature refers to topside of the package, measured on the package body surface.

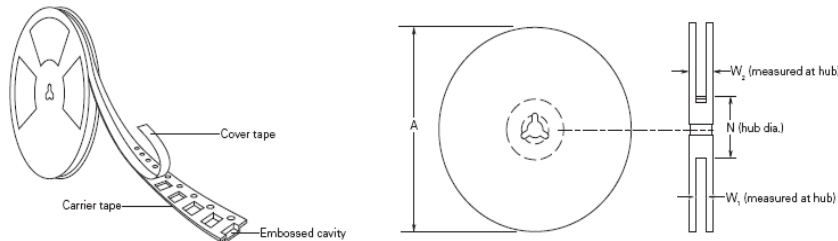
- If reflow temperature exceeds the recommended profile, devices may not meet the performance requirements.
- Recommended reflow methods: IR, vapor phase oven, hot air oven, N2 environment.
- Recommended maximum paste thickness is 0.25mm (0.010 inch).
- Devices can be cleaned using standard industry methods and aqueous solvents.
- Devices can be reworked using the standard industry practices (Avoid contact to the device).

PACKAGING INFORMATION:

Tape specification



Reel dimensions



Description	EIA 481-1 (mm)
W	8.0 ± 0.30
P ₀	4.0 ± 0.10
P ₁	4.0 ± 0.10
P ₂	2.0 ± 0.05
A ₀	1.70 ± 0.10
B ₀	2.45 ± 0.10
B ₁ max.	4.35
D ₀	1.55 ± 0.05
F	3.50 ± 0.05

Description	EIA 481-1 (mm)
E ₁	1.75 ± 0.10
E ₂ min.	6.25
T max.	0.3
T ₁ max.	0.1
K ₀	0.86 ± 0.10
Amax	179
Nmin	53.5
W1	9.5 ± 0.5
W2max	15

Standard Pack Quantity: 4,000pcs, Minimum Order Quantity: 20,000pcs

WARNING:

- Electrical performance of the device can differ according to installation conditions. Users should independently evaluate the suitability of the device under the actual application conditions.
- Operation beyond maximum ratings may result in device damage.
- Exposure to silicon-based oils, solvents, electrolytes, acids, or similar materials can adversely affect device performance.
- The device undergoes thermal expansion during fault conditions. It should be provided with adequate space to allow expansion and should be protected against mechanical stress
- Consult with Littelfuse if the device will experience thermal process other than reflow onto PCB board, such as molding or hand soldering.

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