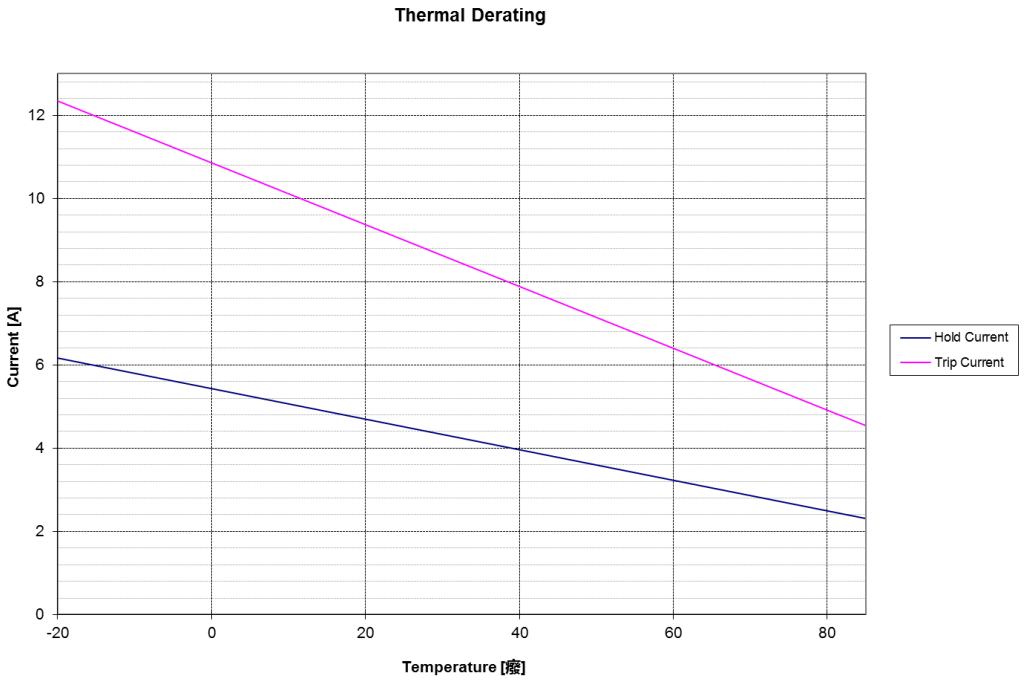
Thermal derating curve



Notes: Values Specified were determined using PCB's with 0.115" x 1.0 ounce copper traces.

Agency Recognition:
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 2002/95/EC Compliant

ELV Compliant
Directive 2000/53/EC Compliant

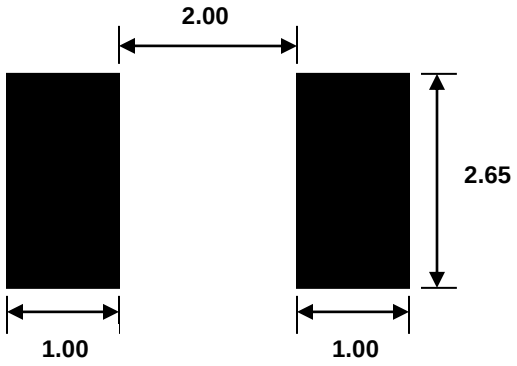
Pb-Free

Halogen Free*
HF

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

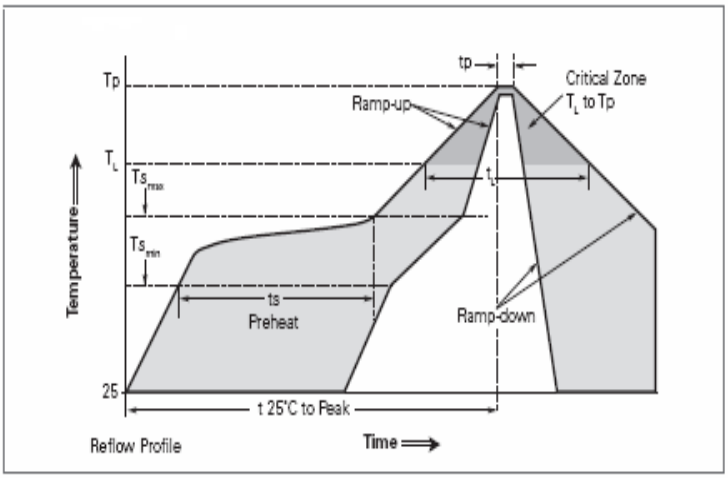
SOLDER REFLOW RECOMMENDATIONS:

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}) • Temperature max. (Ts_{max}) • Time (ts_{min} to ts_{max})	 150°C 200°C 60-120s
Time maintained above: • Temperature (T_L) • Time (t_L)	 217°C 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.

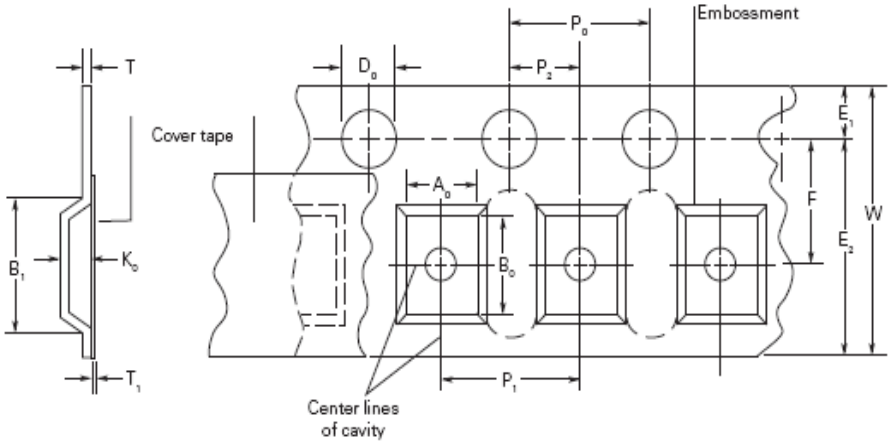


Notes:

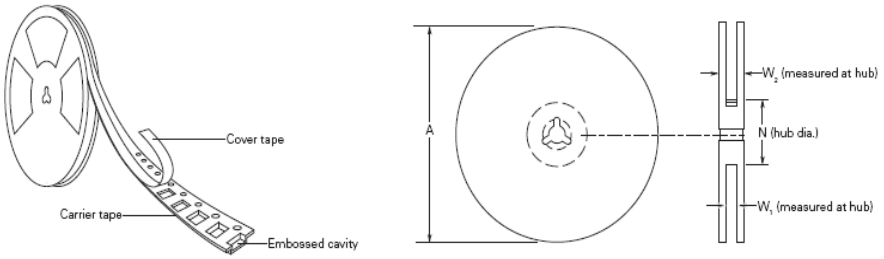
-- All temperature refer to topside of the package, measured on the package body surface
-- If reflow temperature exceeds the recommended profile, devices may not meet the performance requirements
-- Recommended reflow methods: IR, vapor phase oven, hot air oven, N2 environment for lead
-- Recommended maximum paste thickness is 0.25mm (0.010 inch)
-- Devices can be cleaned using standard industry methods and solvents
-- Devices can be reworked using the standard industry practices

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	2.9 ± 0.10
B_0	3.55 ± 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	1.27 ± 0.10
Amax	179
Nmin	53.5
W1	9.5± 0.5
W2max	15

Standard Pack Quantity: 3,000pcs, **Minimum Order Quantity:** 15,000pcs

STORAGE AND FLOOR LIFE:

40°C Max., 70% R.H max. Devices performance may not meet specified ratings if storage condition is exceeded. After opening the packaging, the devices should be used up one time, or the rest of devices should be re-vacuum packaged ASAP.

WARNING:

- User shall independently assess the suitability of these devices for each of their applications
- Operation of these devices beyond the stated maximum ratings could result in damage to the devices and lead to electrical arcing and/or fire
- These devices are intended to protect against the effects of temporary over-current or over-temperature conditions and are not intended to perform as protective devices where such conditions are expected to be repetitive or prolonged in duration
- Exposure to silicon-based oils, solvents, electrolytes, acids, and similar materials can adversely affect the performance of these PPTC devices
- These devices undergo thermal expansion under fault conditions, and thus shall be provided with adequate space and be protected against mechanical stresses
- Circuits with inductance may generate a voltage (L di/dt) above the rated voltage of the PPTC device.
- Hand soldering of PTC devices on boards is generally not recommeded. Users shall define and verifiy this process if needed
- Consult LF when the device is to be applied with thermal processes other than reflow process on the circuit board, such as molding, encapsulation. User should evaluate molding materials used in the charging cable applications to ensure there are non adverse effect on the PTC devices.