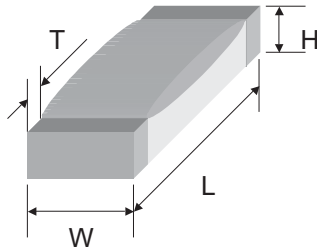
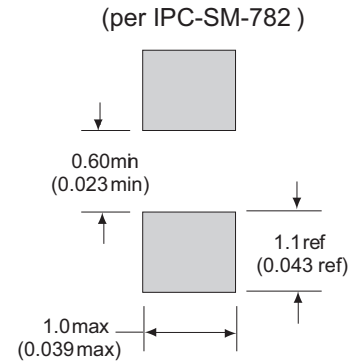


Dimensions - mm (in)



EIA Size	L	W	H	T
0603ESDA	1.60±0.15 (0.063±0.006)	0.80±0.10 (0.031±0.004)	0.60±0.10 (0.024±0.004)	0.31±0.21 (0.012±0.008)

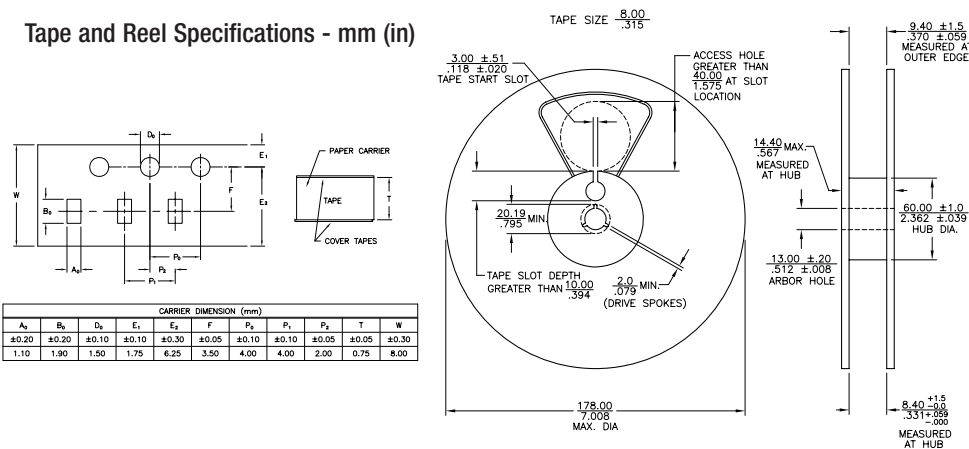
Recommended Pad Layout - in (mm)



Packaging

- 5000 pieces in paper tape on 7 inch diameter (178mm) reel per EIA Standard 481.

Tape and Reel Specifications - mm (in)



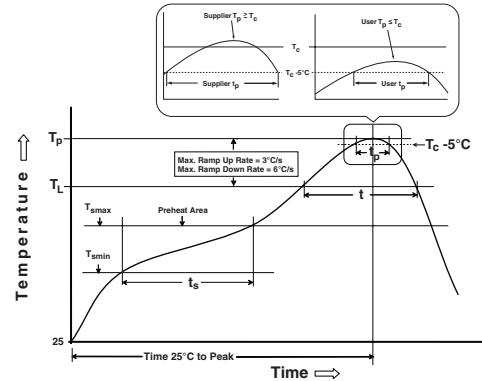
**Environmental Specifications:**

- Coating bond strength: ASTM D3359-83, Method A, Section 6.  
Note: the device coating is not scored.
- Chemical resistance: ASTM D-543, 4 hrs @ 40°C, 3 solutions (H<sub>2</sub>O, detergent solution, defluxer).
- Humidity(steady state): MIL-STD-883, method 1004.7, 85% RH, 85°C, 240 hrs.
- Thermal shock: MIL-STD-202F, method 107G, -65°C to 125°C, 30 min, 5 cycles.
- Vibration: MIL-STD-202F,method 201A,(10 to 55 to 10Hz, 1 minute cycle, 2 hrs. each in X-Y-Z axis).
- Solder leach resistance and terminal adhesion per EIA-567.
- Solderability per MIL-STD-202, Method 208 (95% coverage).
- Full load voltage: 14.4Vdc, 1000hrs., 25°C.
- Operating temperature characteristics: Electrical testing at +105°C and -55°C.

**Soldering Recommendations**

- Compatible with lead and lead-free solder reflow processes
- Peak temperatures and durations:
  - IR Reflow = 260°C max for 30 sec. max. Capable of 3X reflow.
  - Wave Solder = 260°C max. for 10 sec. max.
  - Hand Soldering = 350°C max. for 5 sec. max.

**Recommended IR Reflow Profile**



Profile Feature	Sn-Pb Eutectic Assembly	Pb-Free Assembly
<b>Preheat &amp; Soak</b>		
Temperature min (T <sub>smmin</sub> )	100°C	150°C
Temperature max (T <sub>smmax</sub> )	150°C	200°C
Time (T <sub>smmin</sub> to T <sub>smmax</sub> ) (t <sub>s</sub> )	60-120 seconds	60-120 seconds
Average ramp-up rate (T <sub>smmax</sub> to T <sub>p</sub> )	3°C/second max.	3°C/second max.
Liquidous temperature (T <sub>l</sub> )	183°C	217°C
Time at liquidous (t <sub>l</sub> )	60-150 seconds	60-150 seconds
Peak package body temperature (T <sub>p</sub> )*	See classification temp in Table 4.1	See classification temp in Table 4.2
Time (t <sub>p</sub> )** within 5°C of the specified classification temperature (T <sub>c</sub> )	20** seconds	30** seconds
Average ramp-down rate (T <sub>p</sub> to T <sub>smmax</sub> )	6°C/second max.	6°C/second max.
Time 25°C to peak temperature	6 minutes max.	8 minutes max.

\* Tolerance for peak profile temperature (T<sub>p</sub>) is defined as a supplier minimum and a user maximum.  
\*\* Tolerance for time at peak profile temperature (t<sub>p</sub>) is defined as a supplier minimum and a user maximum.

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