



MiniSShot

ProtoSShot-M Mark I Rocket Motor

Thermal Label Mapping

Rev. 2008/04/22

Introduction

The document illustrates the mounting locations for the thermal measurement labels to be mounted on the ProtoSShot-M Mk.I rocket motor for the first static firing.

A table is provided for recording post-firing temperature readings.

Labels

Omega Irreversible Temperature Monitoring Labels

<i>Omega</i> P/N	Temperature Ratings							
TL-5-340	°F	340	350	360	370	380		YELLOW
	°C	171	177	182	188	193		
TL-5-450	°F	450	465	480	490	500		GOLD
	°C	232	241	249	254	260		
6MB-175/79	°F	175	200	225	250	275	300	RED
	°C	78	93	107	121	135	149	

Adhesive Backs for Easy Mounting for
Temperatures Above -40°C/°F

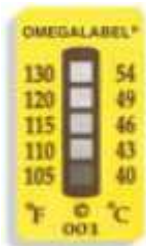
Indicator Turns Black When Exposed

Specifications (TL series)

Accuracy: Up to 99°C (210°F) is $\pm 1^\circ\text{C}$ (1.8°F)

From 100°C (212°F) to 154°C (309°F) is $\pm 1.5^\circ\text{C}$ (2.7°F)

From 160°C (320°F) to 280°C (536°) is $\pm 1\%$ and $\pm 1^\circ\text{C}$ (1.8°F)



Typical appearance of TL series label.



Typical appearance of MB series label.

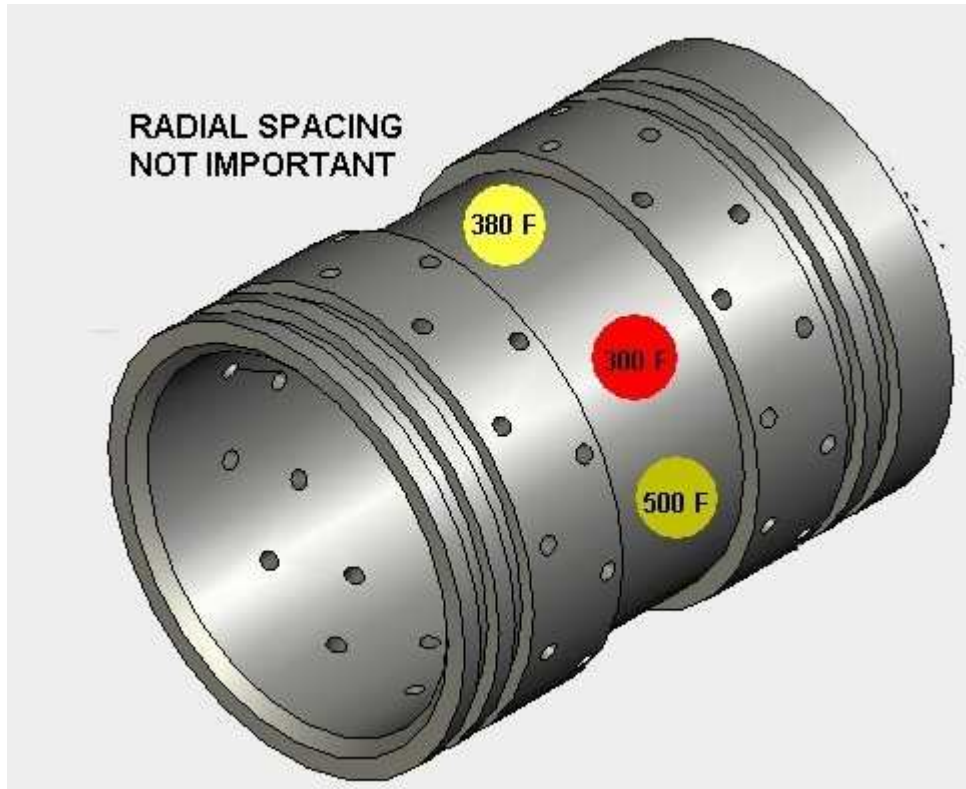


Figure 1 – Labels 300-1, 380-1, 500-1 (Mid-bulkhead)

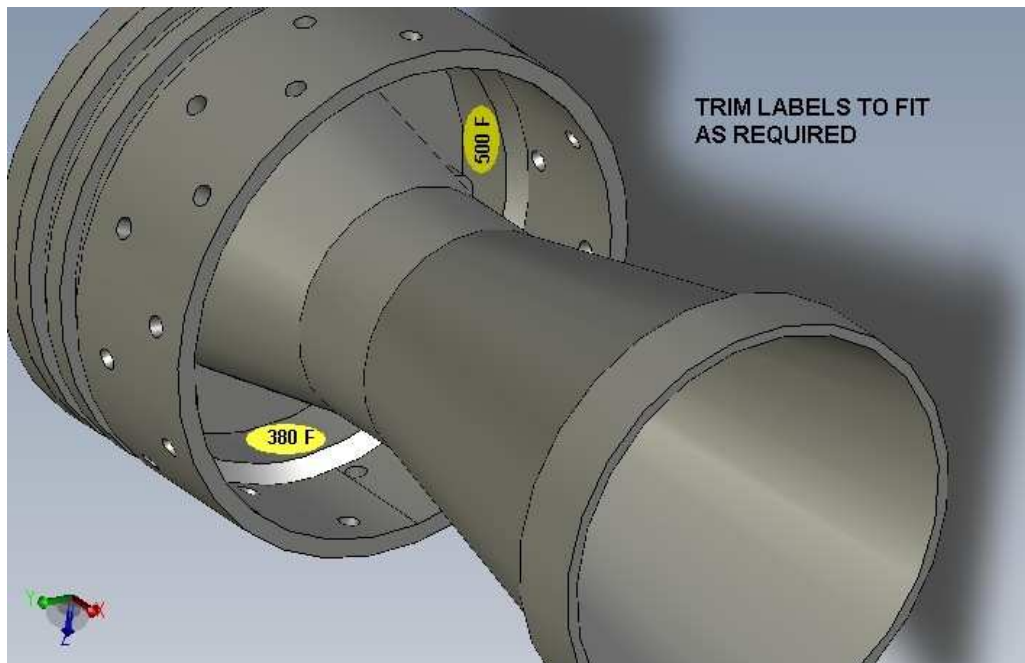


Figure 2 – Labels 380-2, 500-2 (Nozzle Ring)

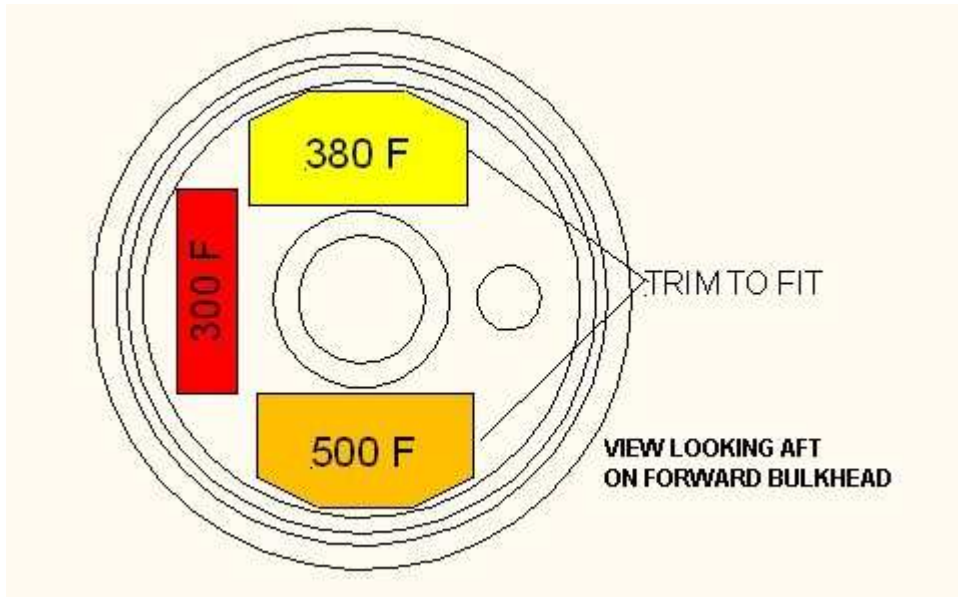


Figure 3 – Labels 300-2, 380-3, 500-3 (Forward Bulkhead)

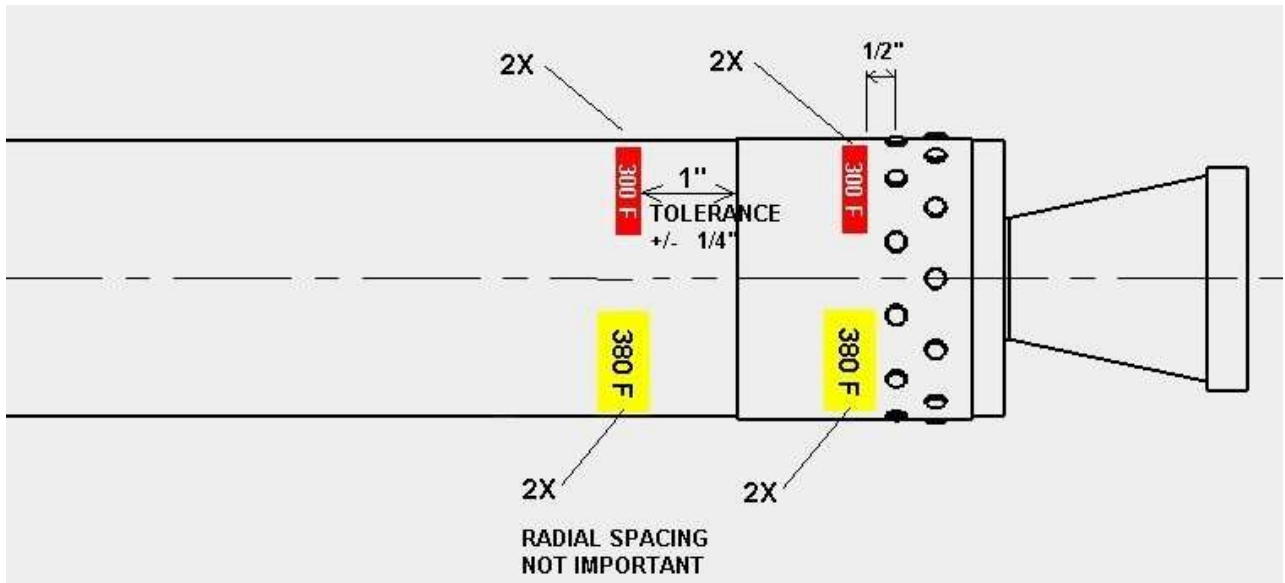


Figure 4 – Labels 300-3a, 300-3b, 380-4a, 380-4b (forward)
300-4a, 300-4b, 380-5a, 380-5b (aft)

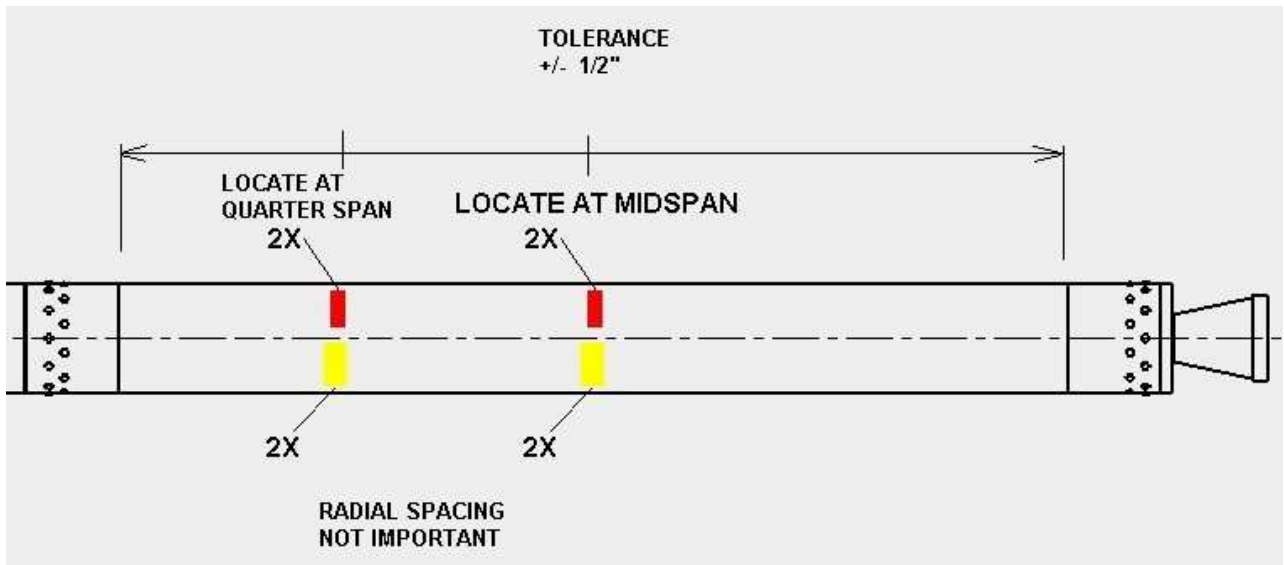


Figure 5 – Labels 300-5a, 300-5b, 380-6a, 380-6b (at midspan)
 300-6a, 300-6b, 380-7a, 380-7b (at quarter span)

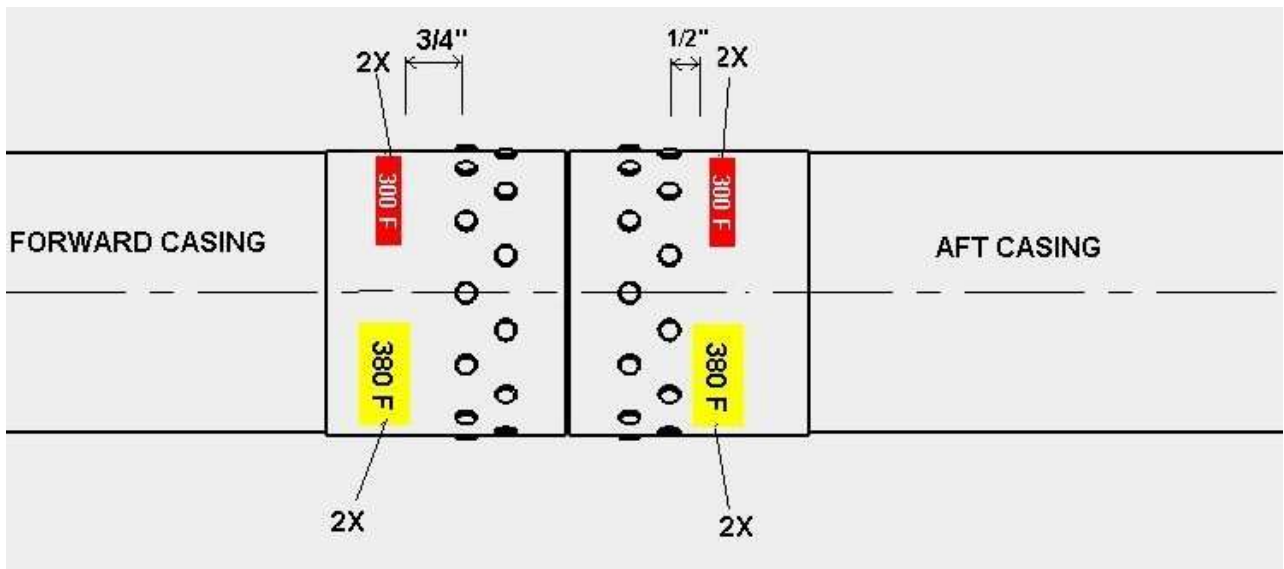


Figure 6 – Labels 300-7a, 300-7b, 380-8a, 380-8b (forward)
 300-8a, 300-8b, 380-9a, 380-9b (aft)

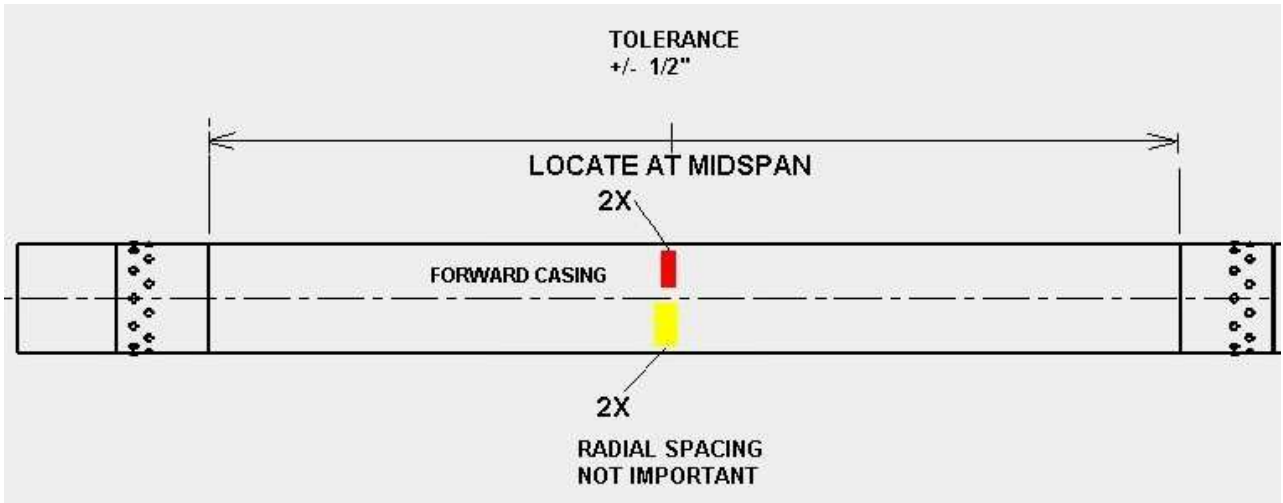


Figure 7 – Labels 300-9a, 300-9b, 380-10a, 380-10b

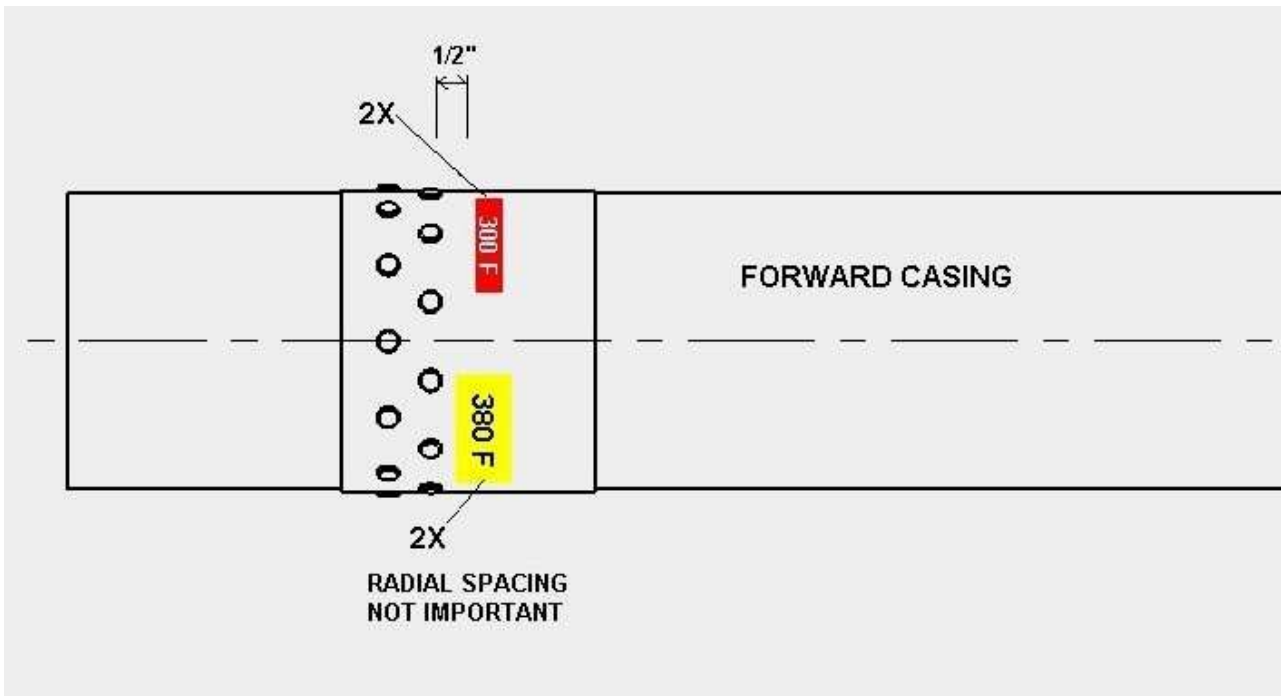


Figure 8 – Labels 300-10a, 300-10b, 380-11a, 380-11b

Table for recording post-firing temperatures

Figure	Label no.	Temperature (°F)	
1	300-1		
	380-1		
	500-1		
2	380-2		
	500-2		
3	300-2		
	380-3		
	500-3		
	300-3a		
	300-3b		
	380-4a		
	380-4b		
	300-4a		
	300-4b		
	380-5a		
	380-5b		
4	300-3a		
	300-3b		
	380-4a		
	380-4b		
	300-4a		
	300-4b		
	380-5a		
380-5b			
5	300-5a		
	300-5b		
	380-6a		
	380-6b		
	300-6a		
	300-6b		
	380-7a		
	380-7b		
6	300-7a		
	300-7b		
	380-8a		
	380-8b		
	300-8a		
	300-8b		
	380-9a		
	380-9b		
7	300-9a		
	300-9b		
	380-10a		
	380-10b		

8	300-10a		
	300-10b		
	380-11a		
	380-11b		