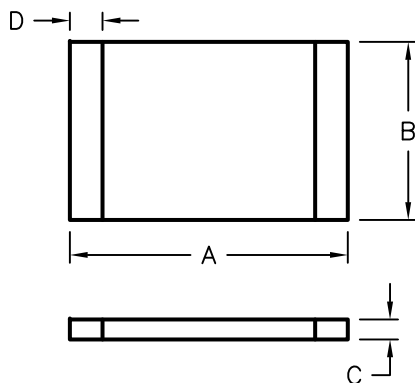


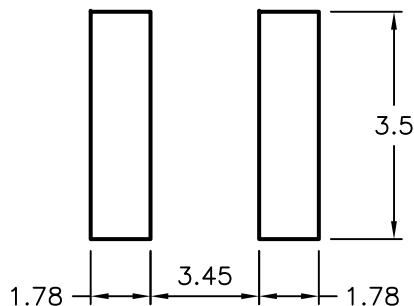
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
2063	A	RELEASED	JN	08/04/09	JWM	08/06/09	JWM	08/06/09



Dimension



Pad Layout



SPECIFICATION

1. Terminal pad Material: Pure Tin
2. Soldering characteristic: Meets EIA specs. RS 186-9E, ANSI/J-std-002 Category 3
3. Operating Current: 100mA~2.0A
4. Maximum Voltage: 6V~60V
5. Temperature Range: -40°C to 85°C

Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate (T _{smax} to T _p)	3 C/second max.
Preheat :	
Temperature Min (T _{smin})	150 °C
Temperature Max (T _{smax})	200 °C
Time (t _{smin} to t _{smax})	60-180 seconds
Time maintained above:	
Temperature(TL)	217 °C
Time (t _L)	60-150 seconds
Peak/Classification Temperature(T _p)	260 C
Time within 5°C of actual Peak :	
Temperature (t _p)	20-40 seconds
Ramp-Down Rate :	6 °C /second max.
Time 25°C to Peak Temperature :	8 minutes max.

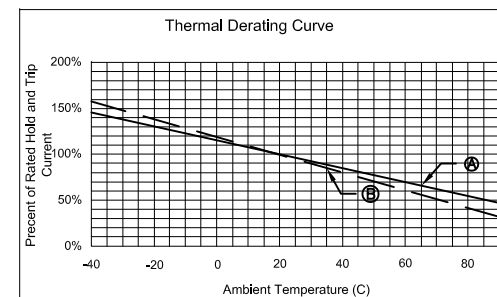
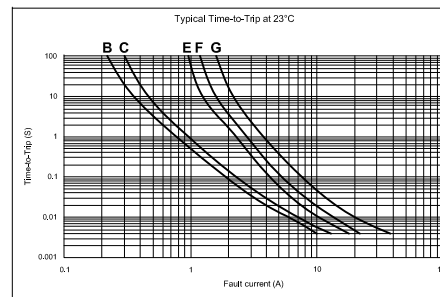
Solder reflow

*Due to "Lead Free" nature, Temperature and Dwelling time for the soldering zone is higher than those for Regular. This may cause damage to other components.

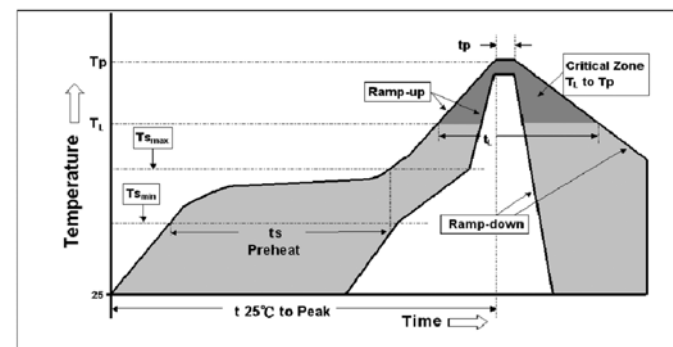
1. Recommended max past thickness > 0.25mm.
2. Devices can be cleaned using standard methods and aqueous solvent.
3. Rework use standard industry practices.
4. Storage Environment : < 30°C / 60%RH

Caution:

1. If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.
2. Devices are not designed to be wave soldered to the bottom side of the board.



Reflow Profile



Mfg. P/N	A		B		C		D	Hold Current I _H , A	Trip Current I _T , A	Rated Voltage V _{MAX} Vdc	Maximum Current I _{MAX} A	Typical Power Pd, W	Max Time-to-Trip		Resistance Tolerance		Thermal Derating Curve Option	Time-to-Trip Curve Option
	Min	Max	Min	Max	Min	Max							Current	Time	R _{MIN} ohms	R _{MAX} ohms		
MC33187	4.37	4.73	3.07	3.41	0.6	0.9	0.3	0.14	0.3	60	10	0.8	8	0.008	1.2	6.5	Option B	Option B
MC33188	4.37	4.73	3.07	3.41	0.6	0.9	0.3	0.2	0.4	30	10	0.8	8	0.02	0.8	5	Option B	Option C
MC33190	4.37	4.73	3.07	3.41	0.35	0.65	0.3	0.5	1	16	40	0.8	8	0.15	0.15	1	Option B	Option E
MC33193	4.37	4.73	3.07	3.41	0.35	0.65	0.3	0.75	1.5	16	40	0.8	8	0.2	0.11	0.45	Option A	Option F
MC33196	4.37	4.73	3.07	3.41	0.25	0.55	0.3	1.1	2.2	8	100	0.8	8	0.3	0.04	0.21	Option A	Option G

DISCLAIMER:
ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE BELIEVE TO BE ACCURATE AND RELIABLE. SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:

Jason Nash

CHECKED BY:

JWM

APPROVED BY:

JWM

DATE:

08/06/09

DATE:

08/06/09

DATE:

08/06/09

DRAWING TITLE:

Surface Mountable PTC Resettable Fuse

SIZE DWG. NO.

A

Ta-1192

ELECTRONIC FILE

Ta-1192.dwg

REV

A

SCALE: NTS

U.O.M.: INCHES [mm]

SHEET: 1 OF 1