# High Power Surface Mount Fuse



# **Description**

- »Widely used in consumer electronics and automotive products
- »Operating temperature: -55 ~ 125  $^{\circ}{\rm C}$
- »Low DCR and low power consumption
- »High reliability solder less fuse
- »Single small case size for current rating from 20A to 125A
- »Recognized to UL 248-1/UL 248-13
- »Halogen-free,RoHS compliant and 100% lead-free



#### **Electrical Characteristics For Series**

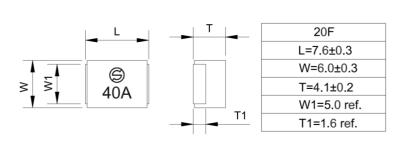
Rating Current	100% of Ampere Rating	250% of Ampere Rating
20A~125A	4 Hour, Min.	60Sec. Max.

#### **Electrical Characteristic Specifications by Item**

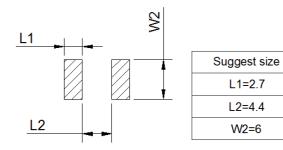
Part No	Rated Voltage DC	Rated Current (A)	Breaking Capacity(A)dc	Typical Melt I <sup>2</sup> T	Nominal Cold DCR*(m Ω)	Alpha Mark
20F2200		20A		160	2.25	20A
20F2300		30A		300	1.40	30A
20F2400		40A		400	1.20	40A
20F2500	80V DC	50A	1000A@80V DC	820	0.87	50A
20F2500H	75V DC	50H	1000A@30V DC	1700	1.00	50H
20F2600	63V DC	60A	1000A@63V DC	1100	0.78	60A
20F2800		80A		2200	0.58	80A
20F3100		100A		3900	0.44	100A
20F3125		125A		5600	0.43	125A

- ▲AC Interrupting Rating (Measured at designated voltage, 100% power factor random closing)
- ▲DC Interrupting Rating (Measured at designated voltage, time constant of less than 1000 microseconds, battery source)
- ▲Typical Melting I²t (Measured with a battery bank at Rated DC voltage, 10x-rated current, but not exceeding the interrupting rating, time constant of calibrated circuit less than 1000 microseconds)
- ▲DC Cold Resistance (Measured at <10% of rated current)

### **Mechanical Dimensions(mm)**



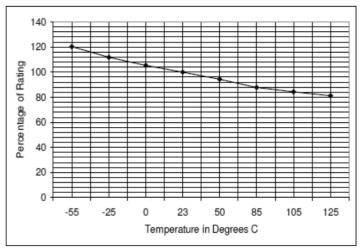
## **Pad Layout**



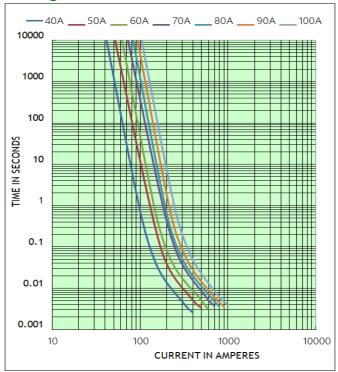


# **Temperature Re-rating Curve**

- \* Normal ambient temperature: 23+/-3  $^{\circ}$ C
- \* Operating temperature: -55 ~ 125  $^{\circ}$ C, with proper correction factor applied

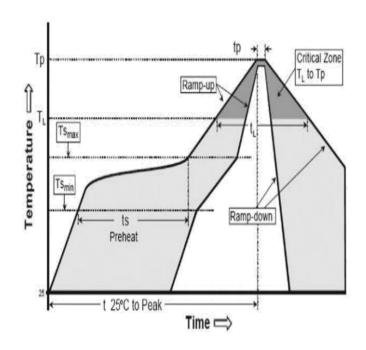


# **Average Time Current Curves**



# Solder reflow profile

Reflow Condition		Pb-Free assembly	
	-Temperature Min(T <sub>s(min)</sub> )	150℃	
Pre Heat	-Temperature Max(T <sub>s(max)</sub> )	200℃	
	-Time (Min to Max)(t <sub>s</sub> )	60-180 secs	
Average ramp up rate (Liquidus Temp(T <sub>L</sub> )to peak		5°C/second max	
Ts(max)to T <sub>∟</sub> Ramp-up rate		5°C/second max	
Reflow	-Temperature(T <sub>L</sub> )(liquidus)	217℃	
	-Temperature(t∟)	60-150 seconds	
Time within 5℃ of actual peak Temperature(t <sub>p</sub> )		20-40 seconds	
Ramp-down Rate		5°C/second max	
Time 25℃ to peak Temperature (T <sub>p</sub> )		8 minutes Max.	
Do not exceed		260℃	



**Part Number System** 

20F	2600	8	00	Н
Fuse Type	Ampere Rating(10 <sup>2</sup> x600mA=60A)	8:80Vdc 7:75Vdc 6:63Vdc	Standards and specifications	High Inrush

**Packaging** 

Packaging Option	Packaging Specification	Quantity
20F	tape-and-reel	1000PCS