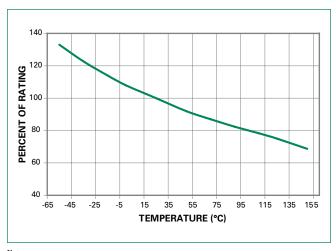


Surface Mount Fuses

Ceramic Fuse > 438A Series

Temperature Re-rating Curve

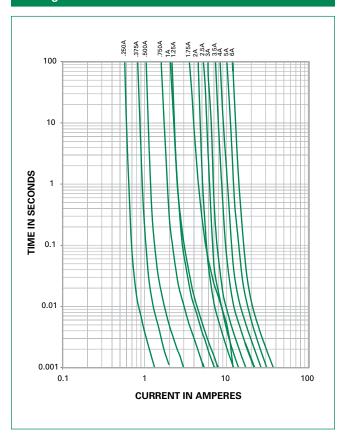


Note:

1. Re-rating depicted in this curve is in addition to the standard re-rating of 20% for continuous operation.

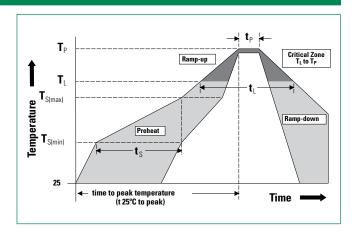
- Example:
- For continuous operation at 75 degrees celsius, the fuse should be rerated as follows: I = $(0.80)|_{RAT} = (0.68)|_{RAT}$

Average Time Current Curves



Soldering Parameters

Reflow Condition		Pb – free assembly	
Pre Heat	- Temperature Min	ı (T _{s(min)})	150°C
	- Temperature Max	к (Т _{s(max)})	200°C
	-Time (Min to Ma	x) (t _s)	60 – 180 seconds
Average Ramp-up Rate (Liquidus Temp (T _L) to peak)		3°C/second max.	
T _{S(max)} to T _L - Ramp-up Rate		5°C/second max.	
Reflow	- Temperature (T_L)	(Liquidus)	217°C
	- Temperature (t _L)		60 – 150 seconds
Peak Temperature (T _P)		260+0/-5 °C	
Time within 5°C of actual peak Temperature $(t_{\rm p})$		10 – 30 seconds	
Ramp-down Rate		6°C/second max.	
Time 25°C to peak Temperature (T _p)		8 minutes max.	
Do not exceed		260°C	
Wave Soldering 260°C, 10 seconds max.			





Surface Mount Fuses

Ceramic Fuse > 438A Series

Product Characteristics

Dimensions

Materials	Body: Advanced Ceramic Terminations: Ag/Ni/Sn (100% Lead-free) Element Cover Coating: Lead-free Glass		
Moisture Sensitivity Level	IPC/JEDEC J-STD-020, Level 1		
Solderability	IPC/EIC/JEDEC J-STD-002, Condition C		
Humidity Test	MIL-STD-202, Method 103, Conditions D		
Resistance to Solder Heat	MIL-STD-202, Method 210, Condition B		
Moisture Resistance	MIL-STD-202, Method 106		
Thermal Shock	MIL-STD-202, Method 107, Condition B		
Mechanical Shock	MIL-STD-202, Method 213, Condition A		
Vibration	MIL-STD-202, Method 201		
Vibration, High Frequency	MIL-STD-202, Method 204, Condition D		
Dissolution of Metallization	IPC/EIC/JEDEC J-STD-002, Condition D		
Terminal Strength	IEC 60127-4		

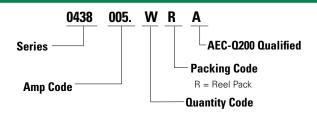
1.575±0.152 [0.062 ± 0.006]

High Temperature Storage	MIL-STD-202 Method 108 with exemptions		
Thermal Shock Test	JESD22 Method JA-104,		
Thermal Shock lest	Test Conditions B and N		
Biased Humidity	MIL-STD-202 Method 103, 85°C/85% RH		
Blased Humidity	with 10% operating power for 1000 hrs		
Operational Life	MIL-STD-202 Method 108, Test Condition D		
Resistance To Solvents	MIL-STD-202 Method 215		
Mechanical Shock	MIL-STD-202 Method 213, Test Condition C		
High Frequency Vibration	MIL-STD-202, Method 204		
Resistance To Soldering Heat	MIL-STD-202 Method 210, Test Condition B		
Solderability	JESD22-B102E Method 1		
Terminal Strength For SMD	AEC Q200-006		
Board Flex	AEC Q200-005		
Electrical Characterization	3 Temperature Electrical Characterization		

Part Marking System

Amp Code	Marking Code
.250	D
.375	E
.500	F
.750	G
001.	Н
1.25	J
1.75	L
002.	N
02.5	<u></u>
003.	Р
03.5	R
004.	S
005.	Т
006.	U

Part Numbering System



Packaging							
Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code				
8mm Tape and Reel	EIA-481, IEC 60286, Part 3	3000	WR				

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