## **501A Series**

## AEC-Q200 Qualified > High Current 1206 Fast-Acting Fuse





### **Additional Information**







Resources

Accessories

Samples

### **Agency Approvals**

Agency	Agency File Number	Ampere Range
c <b>FL</b> °us	E10480	10A - 20A
<b>⊕</b> .	29862	10A - 20A
C <b>The</b> US	210100	

### **Electrical Characteristics for Series**

100% 10A – 20A 4 Hours, Minimum	% of Ampere Rating	Ampere Rating	Opening Time at 25°C
	100%	10A - 20A	4 Hours, Minimum
350% 10A – 20A 5 Seconds, Maximum	350%	10A – 20A	5 Seconds, Maximum

### **Description**

The 501A series AEC-Qualified fuses and Halogen free fuse series are specifically tested to cater to secondary circuit protection needs of compact auto electronics application.

The general design ensures excellent temperature stability and performance reliability. The high I2t values which are typical in the Littelfuse Ceramic Fuse family, ensure high inrush current withstanding capability.

### **Features & Benefits**

- Operating Temperature from -55°C to +150°C
- 100% Lead-free, RoHS compliant and Halogen-free
- Suitable for both leaded and lead-free reflow/wave soldering
- Recognized to UL/CSA/NMX 248-1 and UL/CSA/NMX 248-
- AEC-Q200 Qualified

### **Applications**

- Li-ion Battery
- LED Head-Lights
- Automotive Navigation System
- TFT Display
- Battery Management System (BMS)
- Clusters

### **Electrical Specifications by Item**

Ampere	Amp	Max. Voltage	Interrupting Rating	Nominal	Nominal	Nominal Voltage	Nominal Power	Agency A	pprovals
Rating (A)	Code	Rating (V)	(DC) <sup>1</sup>	Resistance Melting l <sup>2</sup> t (Ohms) <sup>2</sup> (A <sup>2</sup> Sec.) <sup>3</sup>		Drop at Rated Current (V) <sup>4</sup>	Dissipation at Rated Current (W)	c <b>FL</b> °us	<b>®</b> ;
10	010.	32		0.00362	10.385	0.04407	0.4407	Х	X
12	012.	32	150A @ 32VDC	0.00311	20.341	0.04927	0.5912	Х	X
15	015.	32		0.00250	39.700	0.04843	0.7265	Х	X
20	020	32		0.00194	86.360	0.05888	1 1776	×	×

### Notes:

- 1. DC Interrupting Rating tested at rated voltage with time constant <0.5msec 2. Nominal Resistance measured with <10% rated current.
- 3. Nominal Melting I²t measured at 1 msec. opening time. For other I²t data refer to chart.
- 4. Nominal Voltage Drop measured at rated current after temperature has stabilized and with fuse mounted on board with 3oz Cu trace.

Devices designed to carry rated current for four hours minimum. It is recommended that devices be operated continuously at no more than 80% rated current. See "Temperature Re-rating Curve" for additional re-rating

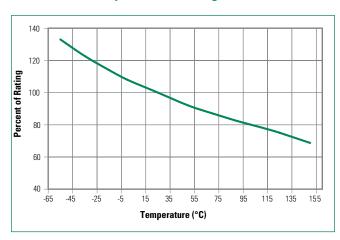
Devices designed to be mounted with marking code facing up.



# **501A Series**

## AEC-Q200 Qualified > High Current 1206 Fast-Acting Fuse

### **Temperature Re-rating Curve**

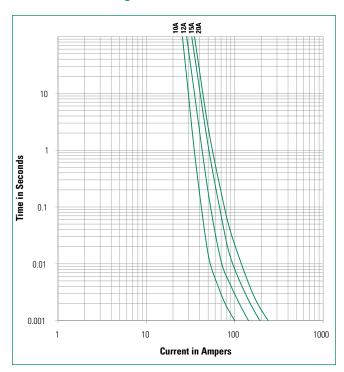


Note:

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

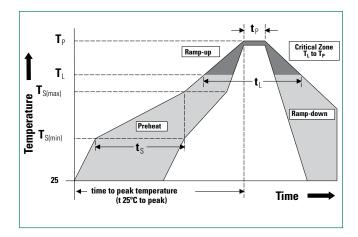
### **Average Time Current Curves**



### **Soldering Parameters**

Reflow Cond	Pb – free assembly		
	-Temperature Min (T <sub>s(min)</sub> )	150°C	
Pre Heat	-Temperature Max (T <sub>s(max)</sub> )	200°C	
	-Time (Min to Max) (t <sub>s</sub> )	60 – 180 seconds	
Average Ran peak)	3°C/second max.		
$T_{S(max)}$ to $T_L$ -	5°C/second max.		
- Temperature (T <sub>L</sub> ) (Liquidus)		217°C	
Renow	-Temperature (t <sub>L</sub> )	60 - 150 seconds	
Peak Temper	rature (T <sub>P</sub> )	260+0/-5 °C	
Time within	5°C of actual peak Temperature (t <sub>p</sub> )	10 – 30 seconds	
Ramp-down	Rate	6°C/second max.	
Time 25°C to	peak Temperature (T <sub>P</sub> )	8 minutes max.	
Do not exce	ed	260°C	

260°C, 10 seconds max.





Wave Soldering

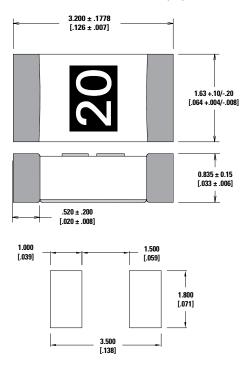
## **501A Series**

## AEC-Q200 Qualified > High Current 1206 Fast-Acting Fuse

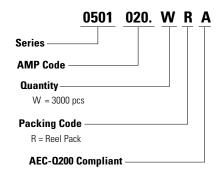
### **Product Characteristics**

Materials  Body: Advanced Ceramic Terminations: Ag / Ni / Sn (100% Lead-free) Element Cover Coating: Lead-free Glass Moisture Sensitivity Level Flement Cover Coating: Lead-free Glass IPC/JEDEC J-STD-020, Level 1 IPC/ECA/JEDEC J-STD-002, Condition C MILSTD-202, Method 103, C onditions D MILSTD-202, Method 210, Condition B Moisture Resistance MILSTD-202, Method 106 MillsTD-202, Method 107, Condition B Mechanical Shock MILSTD-202, Method 213, Condition A Vibration MILSTD-202, Method 201 Vibration, High Frequency MILSTD-202, Method 201 Vibration of Metallization PC/ECA/JEDEC J-STD-002, Condition D MILSTD-202, Method 108 with exemptions MILSTD-202, Method 108 with exemptions MILSTD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  Operational Life Resistance to Solvents MILSTD-202, Method 215 MILSTD-202, Method 215 MILSTD-202, Method 213, Test Condition C MILSTD-202, Method 213, Test Condition C MILSTD-202, Method 204 Resistance to Soldering Heat  Solderability JESD22-B102E Method 1 Resistance to Soldering Heat  Solderability JESD22-B102E Method 1 AEC-0200-006  Board Flex  Electrical Characterization  Reminal Strength for SMD Recipied Supplies Agency 1 AEC-0200-005 Conducted at minimum, ambient and maximum temperatures	Product Characteristics				
Materials   Free   Element Cover Coating: Lead-free Glass   Moisture Sensitivity Level   IPC/JEDEC J-STD-020, Level 1   IPC/ECA/JEDEC J-STD-002, Condition C   MILSTD-202, Method 103, C   onditions D   MILSTD-202, Method 210, Condition B   Moisture Resistance   MILSTD-202, Method 106   MILSTD-202, Method 107, Condition B   Mechanical Shock   MILSTD-202, Method 213, Condition A   Wibration   WilsTD-202, Method 201   Wibration, High Frequency   MILSTD-202, Method 201   Wibration, High Frequency   MILSTD-202, Method 204, Condition D   MILSTD-202, Method 204, Condition D   MILSTD-202, Method 108   With exemptions   MILSTD-202, Method 108   With exemptions   MILSTD-202, Method 108   With exemptions   MILSTD-202, Method 103, 85°C/85%   RH with 10% operating power for 1000hrs   MILSTD-202, Method 108, Test Condition D   MILSTD-202, Method 215   MILSTD-202, Method 213, Test Condition C   MILSTD-202, Method 213, Test Condition C   MILSTD-202, Method 204   MILSTD-202, Method 210, Test Condition B   Solderability   JESD22-B102E Method 1   JESD22-B102E Method 1   MILSTD-202, Method 210, Test Condition B   Solderability   JESD22-B102E Method 1   AEC-0200-006   MEC-0200-006   MEC-0200-005   Conducted at minimum, ambient and   MILSTD-202, Method 204   MILSTD-202, Method 204   MILSTD-202, Method 204   MILSTD-202, Method 210, Test Condition B   MILSTD-202, Method 210, Te		Body: Advanced Ceramic			
Moisture Sensitivity Level Solderability IPC/ECA/JEDEC J-STD-020, Level 1 IPC/ECA/JEDEC J-STD-002, Condition C MILSTD-202, Method 103, C onditions D Resistance to Solder Heat MilsTD-202, Method 210, Condition B Moisture Resistance MilsTD-202, Method 106 Thermal Shock MilsTD-202, Method 107, Condition B Mechanical Shock MilsTD-202, Method 213, Condition A Vibration MilsTD-202, Method 201 Vibration, High Frequency Dissolution of Metallization High Temperature Storage Thermal Shock Test  Biased Humidity  MilsTD-202, Method JA-104, Test Conditions B and N MilsTD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  Operational Life Mechanical Shock MilsTD-202, Method 213, Test Condition D Resistance to Solvents MilsTD-202, Method 213, Test Condition C MilsTD-202, Method 213, Test Condition C MilsTD-202, Method 214 Test Condition C MilsTD-202, Method 204  Method 204  Resistance to Soldering Heat  Solderability  JESD22-B102E Method 1 Terminal Strength for SMD Board Flex  Conducted at minimum, ambient and	Materials	<b>3</b> · · · ·			
Solderability		Element Cover Coating: Lead-free Glass			
Humidity Test  MILSTD-202, Method 103, C onditions D  Resistance to Solder Heat Moisture Resistance MILSTD-202, Method 106  Thermal Shock MILSTD-202, Method 107, Condition B  Mechanical Shock MILSTD-202, Method 213, Condition A  Vibration MILSTD-202, Method 201 Vibration, High Frequency Dissolution of Metallization High Temperature Storage Thermal Shock Test  Biased Humidity  Dissolution MILSTD-202, Method 108 With exemptions  JESD22 Method JA-104, Test Conditions B and N  MILSTD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  MILSTD-202, Method 108, Test Condition D  Resistance to Solvents MILSTD-202, Method 215  Mechanical Shock MILSTD-202, Method 213, Test Condition C  High Frequency Vibration MILSTD-202, Method 204  Resistance to Soldering Heat MILSTD-202, Method 210, Test Condition B  Solderability JESD22-B102E Method 1  Terminal Strength for SMD AEC-Q200-006 Board Flex Flectrical Characterization  Fig. 202, Method 210, Conducted at minimum, ambient and	Moisture Sensitivity Level	IPC/JEDEC J-STD-020, Level 1			
Resistance to Solder Heat Moisture Resistance Milestro-202, Method 210, Condition B Moisture Resistance Milestro-202, Method 106 Milestro-202, Method 107, Condition B Mechanical Shock Milestro-202, Method 213, Condition A Wibration Milestro-202, Method 201 Wibration, High Frequency Milestro-202, Method 204, Condition D IPC/ECA/JEDEC J-STD-002, Condition D Milestro-202, Method 108 With exemptions  Thermal Shock Test JESD22 Method JA-104, Test Conditions B and N Milestro-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  Operational Life Resistance to Solvents Milestro-202, Method 215 Milestro-202, Method 213, Test Condition C Milestro-202, Method 213, Test Condition C Milestro-202, Method 204 Mile	Solderability	IPC/ECA/JEDEC J-STD-002, Condition C			
Resistance to Solder Heat MillsTD-202, Method 210, Condition B Moisture Resistance Thermal Shock MillsTD-202, Method 107, Condition B Mechanical Shock MillsTD-202, Method 213, Condition A Vibration MillsTD-202, Method 201 Vibration, High Frequency Dissolution of Metallization High Temperature Storage Thermal Shock Test  Biased Humidity  Diproversion of Metallization  MillsTD-202, Method 108 With exemptions  JESD22 Method JA-104, Test Conditions B and N MillsTD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  MillsTD-202, Method 108, Test Condition D  Resistance to Solvents  MillsTD-202, Method 215  MillsTD-202, Method 213, Test Condition C  High Frequency Vibration MillsTD-202, Method 204  MillsTD-202, Method 204  MillsTD-202, Method 204  MillsTD-202, Method 210, Test Condition B  Solderability JESD22-B102E Method 1  Ferminal Strength for SMD  Rec-Q200-006  Board Flex  Flectrical Characterization  Fig. 210, Method 210, Conducted at minimum, ambient and	Humidity Tost	MIL-STD-202, Method 103, C			
Moisture ResistanceMIL-STD-202, Method 106Thermal ShockMIL-STD-202, Method 213, Condition BMechanical ShockMIL-STD-202, Method 213, Condition AVibrationMIL-STD-202, Method 201Vibration, High FrequencyMIL-STD-202, Method 204, Condition DDissolution of MetallizationIPC/ECA/JEDEC J-STD-002, Condition DHigh Temperature StorageMIL-STD-202, Method 108 with exemptionsThermal Shock TestJESD22 Method JA-104, Test Conditions B and NBiased HumidityMIL-STD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrsOperational LifeMIL-STD-202, Method 108, Test Condition DResistance to SolventsMIL-STD-202, Method 215Mechanical ShockMIL-STD-202, Method 213, Test Condition CHigh Frequency VibrationMIL-STD-202, Method 204Resistance to Soldering HeatMIL-STD-202, Method 210, Test Condition BSolderabilityJESD22-B102E Method 1Terminal Strength for SMDAEC-Q200-006Board FlexAEC-Q200-005Flectrical CharacterizationConducted at minimum, ambient and	numuity lest	onditions D			
Thermal Shock Mechanical Shock Mil_STD-202, Method 213, Condition A  Vibration Mil_STD-202, Method 201  Vibration, High Frequency Dissolution of Metallization High Temperature Storage Thermal Shock Test  Biased Humidity  Dissolution Life Resistance to Solvents Mil_STD-202, Method 108, Test Condition D  Resistance to Soldering Heat  Solderability  JESD22 Method JA-104, Test Conditions B and N  Mil_STD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  Mil_STD-202, Method 108, Test Condition D  Resistance to Solvents Mil_STD-202, Method 215  Mil_STD-202, Method 213, Test Condition C  Mil_STD-202, Method 204  Mil_STD-202, Method 204  Mil_STD-202, Method 204  Resistance to Soldering Heat  Solderability JESD22-B102E Method 1  Terminal Strength for SMD  Rec-Q200-006  Board Flex  Flectrical Characterization  Mil_STD-202, Method 2 at minimum, ambient and	Resistance to Solder Heat	MIL-STD-202, Method 210, Condition B			
Mechanical ShockMIL-STD-202, Method 213, Condition AVibrationMIL-STD-202, Method 201Vibration, High FrequencyMIL-STD-202, Method 204, Condition DDissolution of MetallizationIPC/ECA/JEDEC J-STD-002, Condition DHigh Temperature StorageMIL-STD-202, Method 108 with exemptionsThermal Shock TestJESD22 Method JA-104, Test Conditions B and NBiased HumidityMIL-STD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrsOperational LifeMIL-STD-202, Method 108, Test Condition DResistance to SolventsMIL-STD-202, Method 215Mechanical ShockMIL-STD-202, Method 213, Test Condition CHigh Frequency VibrationMIL-STD-202, Method 204Resistance to Soldering HeatMIL-STD-202, Method 210, Test Condition BSolderabilityJESD22-B102E Method 1Terminal Strength for SMDAEC-0200-006Board FlexAEC-0200-005Flectrical CharacterizationConducted at minimum, ambient and	Moisture Resistance	MIL-STD-202, Method 106			
Vibration MIL-STD-202, Method 201  Vibration, High Frequency MIL-STD-202, Method 204, Condition D  Dissolution of Metallization IPC/ECA/JEDEC J-STD-002, Condition D  High Temperature Storage MIL-STD-202, Method 108 with exemptions  Thermal Shock Test JESD22 Method JA-104, Test Conditions B and N  MIL-STD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  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  Conducted at minimum, ambient and	Thermal Shock	MIL-STD-202, Method 107, Condition B			
Vibration, High Frequency Dissolution of Metallization High Temperature Storage Thermal Shock Test  Biased Humidity  Operational Life Resistance to Solvents  High Frequency Vibration High Frequency Vibration Resistance to Soldering Heat  Solderability  Solderability  MILSTD-202, Method 108 with exemptions  JESD22 Method JA-104, Test Conditions B and N MILSTD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs MILSTD-202, Method 108, Test Condition D MILSTD-202, Method 215 MILSTD-202, Method 215 MILSTD-202, Method 213, Test Condition C MILSTD-202, Method 204 MILSTD-202, Method 204 MILSTD-202, Method 204 MILSTD-202, Method 204 MILSTD-202, Method 210, Test Condition B  Solderability JESD22-B102E Method 1 Terminal Strength for SMD AEC-Q200-006 Board Flex  Flectrical Characterization  Conducted at minimum, ambient and	Mechanical Shock	MIL-STD-202, Method 213, Condition A			
Dissolution of Metallization  High Temperature Storage Thermal Shock Test  Biased Humidity  Operational Life Resistance to Solvents  Mil-STD-202, Method 108, Mil-STD-202, Method 103, 85°C/85% Mil-STD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  Mil-STD-202, Method 108, Test Condition D  Mil-STD-202, Method 108, Test Condition D  Mil-STD-202, Method 215  Mechanical Shock  Mil-STD-202, Method 213, Test Condition C  High Frequency Vibration Mil-STD-202, Method 204  Mil-STD-202, Method 204  Mil-STD-202, Method 210, Test Condition B  Solderability JESD22-B102E Method 1  Terminal Strength for SMD  Board Flex  AEC-Q200-006  Conducted at minimum, ambient and	Vibration	MIL-STD-202, Method 201			
High Temperature Storage Thermal Shock Test  Biased Humidity  Operational Life Resistance to Solvents  High Frequency Vibration Resistance to Soldering Heat  Solderability  Solderability  Denote Thermal Shock  Condition D  MIL-STD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  MIL-STD-202, Method 108, Test Condition D  MIL-STD-202, Method 215  MIL-STD-202, Method 215  MIL-STD-202, Method 213, Test Condition C  MIL-STD-202, Method 204  MIL-STD-202, Method 204  MIL-STD-202, Method 204  MIL-STD-202, Method 204  MIL-STD-202, Method 210, Test Condition B  Solderability  JESD22-B102E Method 1  Terminal Strength for SMD  AEC-Q200-006  Board Flex  Flectrical Characterization  Condition D  MIL-STD-202, Method 210, Test Condition B  Conducted at minimum, ambient and	Vibration, High Frequency	MIL-STD-202, Method 204, Condition D			
Condition D  High Temperature Storage  Thermal Shock Test  Thermal Shock Test  Biased Humidity  Department of Solvents  MIL-STD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  WIL-STD-202, Method 108, Test Condition D  Resistance to Solvents  MIL-STD-202, Method 215  MIL-STD-202, Method 215  MIL-STD-202, Method 213, Test Condition C  High Frequency Vibration  MIL-STD-202, Method 204  MIL-STD-202, Method 204  MIL-STD-202, Method 204  MIL-STD-202, Method 210, Test Condition B  Solderability  JESD22-B102E Method 1  Terminal Strength for SMD  Board Flex  Flectrical Characterization  MIL-STD-200-006  Conducted at minimum, ambient and	Dissolution of Metallization				
Thermal Shock Test  JESD22 Method JA-104, Test Conditions B and N  MIL-STD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  Operational Life  Resistance to Solvents  MIL-STD-202, Method 108, Test Condition D  MIL-STD-202, Method 215  MIL-STD-202, Method 215  MIL-STD-202, Method 213, Test Condition C  High Frequency Vibration  MIL-STD-202, Method 204  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  Flectrical Characterization  Conducted at minimum, ambient and	Dissolution of Mctamzation				
Thermal Shock Test  JESD22 Method JA-104, Test Conditions B and N  MIL-STD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  Operational Life  Resistance to Solvents  Mechanical Shock High Frequency Vibration Resistance to Soldering Heat  Solderability  JESD22-B102E Method 1  AEC-Q200-006  Board Flex  Flectrical Characterization  MIL-STD-202, Method 210, Test Condition B  JESD22-B102E Method 1  AEC-Q200-005  Conducted at minimum, ambient and	High Temperature Storage				
Test Conditions B and N  MIL-STD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  Operational Life  Resistance to Solvents  MIL-STD-202, Method 108, Test Condition D  MIL-STD-202, Method 215  MIL-STD-202, Method 215  MIL-STD-202, Method 213, Test Condition C  High Frequency Vibration  MIL-STD-202, Method 204  MIL-STD-202, Method 204  MIL-STD-202, Method 210, Test Condition B  Solderability  JESD22-B102E Method 1  Terminal Strength for SMD  AEC-Q200-006  Board Flex  Flectrical Characterization  Test Conditions B and N  MIL-STD-202, Method 108, Test Condition D  AEC-Q200-006  Conducted at minimum, ambient and	3 - 1	·			
Biased Humidity  MIL-STD-202, Method 103, 85°C/85% RH with 10% operating power for 1000hrs  MIL-STD-202, Method 108, Test Condition D  Resistance to Solvents  MIL-STD-202, Method 215  MIL-STD-202, Method 213, Test Condition C  High Frequency Vibration  Resistance to Soldering Heat  Solderability  JESD22-B102E Method 1  Terminal Strength for SMD  Board Flex  AEC-Q200-005  Conducted at minimum, ambient and	Thermal Shock Test				
Biased Humidity  RH with 10% operating power for 1000hrs  MILSTD-202, Method 108, Test Condition D  Resistance to Solvents  MILSTD-202, Method 215  Mechanical Shock  MILSTD-202, Method 213, Test Condition C  High Frequency Vibration  MILSTD-202, Method 204  MILSTD-202, Method 204  MILSTD-202, Method 210, Test Condition B  Solderability  JESD22-B102E Method 1  Terminal Strength for SMD  AEC-Q200-006  Board Flex  Flectrical Characterization  MILSTD-202, Method 210, Test Condition B  Conducted at minimum, ambient and					
1000hrs  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  Flectrical Characterization  MIL-STD-202, Method 210, Test Condition B  Conducted at minimum, ambient and	Riased Humidity	, , , , , , , , , , , , , , , , , , , ,			
Operational Life  MILSTD-202, Method 108, Test Condition D  Resistance to Solvents  MILSTD-202, Method 215  Mechanical Shock  MILSTD-202, Method 213, Test Condition C  High Frequency Vibration  MILSTD-202, Method 204  MILSTD-202, Method 210, Test Condition B  Solderability  JESD22-B102E Method 1  Terminal Strength for SMD  AEC-Q200-006  Board Flex  Flectrical Characterization  MILSTD-202, Method 210, Test Condition B  Conducted at minimum, ambient and	Diasca Haimarry				
Test Condition D  Resistance to Solvents  MILSTD-202, Method 215  Mechanical Shock  High Frequency Vibration  Resistance to Soldering Heat  Solderability  Terminal Strength for SMD  Board Flex  Flectrical Characterization  MILSTD-202, Method 204  MILSTD-202, Method 210, Test Condition B  Solderability  JESD22-B102E Method 1  AEC-Q200-006  Board Flex  Conducted at minimum, ambient and					
Mechanical Shock  MILSTD-202, Method 213, Test Condition C  High Frequency Vibration  MILSTD-202, Method 204  MILSTD-202, Method 210, Test Condition B  Solderability  JESD22-B102E Method 1  Terminal Strength for SMD  AEC-Q200-006  Board Flex  AEC-Q200-005  Conducted at minimum, ambient and	Operational Life	· · · · · · · · · · · · · · · · · · ·			
Mechanical Shock Test Condition C MilesTD-202, Method 204  Resistance to Soldering Heat MilesTD-202, Method 210, Test Condition B  Solderability JESD22-B102E Method 1  Terminal Strength for SMD AEC-0200-006  Board Flex AEC-0200-005 Conducted at minimum, ambient and	Resistance to Solvents	MIL-STD-202, Method 215			
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-0200-006  Board Flex AEC-0200-005  Flectrical Characterization Conducted at minimum, ambient and	Mashaniaal Chash	MIL-STD-202, Method 213,			
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  Flectrical Characterization Conducted at minimum, ambient and	iviecnanicai Snock	Test Condition C			
Heat Test Condition B  Solderability JESD22-B102E Method 1  Terminal Strength for SMD AEC-Q200-006  Board Flex AEC-Q200-005  Flectrical Characterization Conducted at minimum, ambient and	High Frequency Vibration	MIL-STD-202, Method 204			
Heat Test Condition B  Solderability JESD22-B102E Method 1  Terminal Strength for SMD AEC-Q200-006  Board Flex AEC-Q200-005  Flectrical Characterization  Conducted at minimum, ambient and	Resistance to Soldering	MIL-STD-202, Method 210,			
Terminal Strength for SMD AEC-Q200-006  Board Flex AEC-Q200-005  Conducted at minimum, ambient and		Test Condition B			
Terminal Strength for SMD AEC-Q200-006  Board Flex AEC-Q200-005  Conducted at minimum, ambient and	Solderability	JESD22-B102E Method 1			
Board Flex AEC-Q200-005  Conducted at minimum, ambient and	•				
Electrical Characterization Conducted at minimum, ambient and					
Electrical Characterization	FI				
	Electrical Characterization	·			

### Dimensions mm (in.)



### **Part Numbering System**



### **Part Marking System**

Amp Code	Marking Code
010.	10
012.	12
015.	15
020.	20

### **Packaging**

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

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