集电通
JDT FUSE
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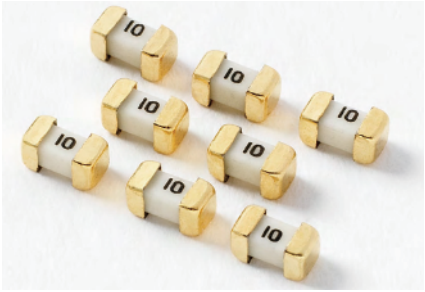
PRODUCT DATASHEET

Nano Fuse · Surface Mount

J458DR

J458DR SERIES FUSE



Description

The J458DR Series is an ultra-small fuse, square surface mount fuse designed to support a variety of space constrained overcurrent protection applications. Offering a 1206 size footprint.

Features

- Surface Mount Fuse
- RoHS Compliant and Halogen Free
- Fully compatible with lead free soldering profiles

Electrical Characteristics

% of Ampere Rating	Opening Time
100%	4 h Min
250%	5 s Max
1000%	0.001s~0.01s

Applications

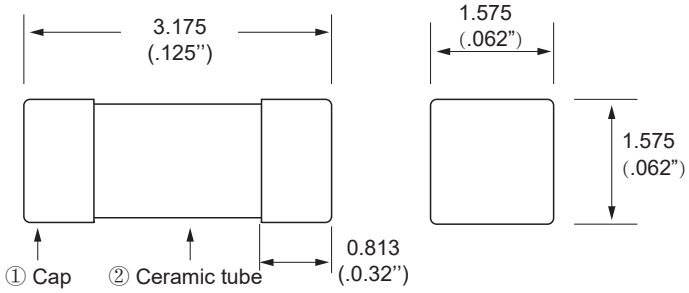
- Notebook PC
- LCD backlight inverter
- LCD Panel
- DC/DC converter
- Battery Pack
- Car Navigation System
- Network Equipment
- Telecom Equipment
- Electronic Signage
- Portable Consumer

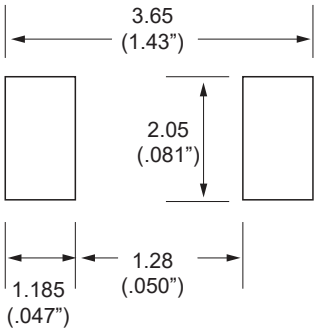
Performance Specification

Part Number	Marking	Ampere Rating (A)	Max Voltage Rating(V)	Interrupting Rating	Nominal Cold Resistance (mΩ)	Nominal Melting I^2t (A^2sec)
J458001.DR	H	1.0	75V	50A @75VDC 50A @48VAC	183.84	0.163
J458002.DR	N	2.0			52.20	0.945
J45802.5DR	O	2.5			42.14	1.401
J458003.DR	P	3.0			37.06	2.283
J458004.DR	S	4.0		50A @75VDC 50A @32VAC	21.12	4.81
J458005.DR	T	5.0			15.00	7.90
J458010.DR	10	10.0	63V	50A @63VDC 50A @32VAC	6.98	15.6

Dimensions

unit : mm





Recommended pad layout

NO.	Component	Material
①	Cap	Gold Plated Brass
②	Body	Ceramic

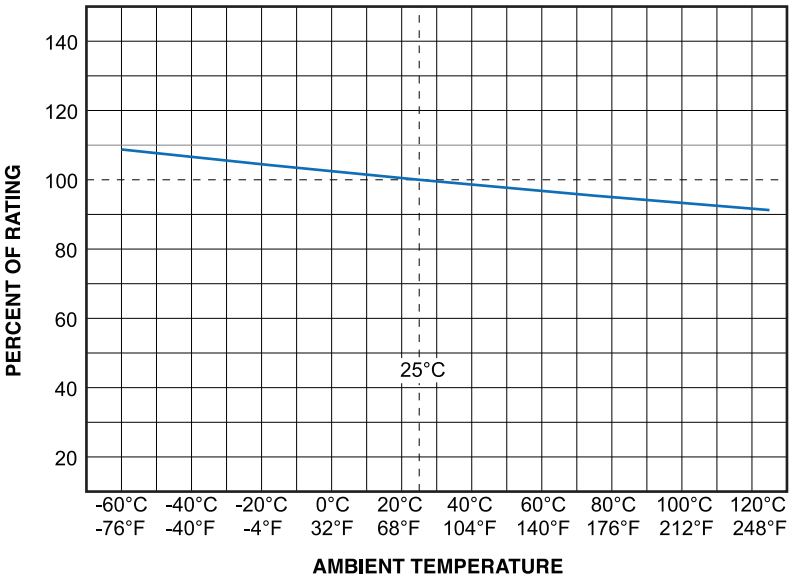
Product Characteristics

No.	Item	Contain	Reference standard
1	Insulation Resistance (after Opening)	10,000 ohms minimum	MIL-STD-202G, Method 302 Test ConditionA
2	Solderability	T=235°C±5°C, t=5+0/-0.5s, Cover≧95%	MIL-STD-202G, Method 208H
3	Resistance to Soldering Heat	10 sec at 260°C	MIL-STD-202G, Method 210F Test Condition B
4	Thermal Shock	5 cycles, -65°C to 125°C,	MIL-STD-202F, Method 107G Test Condition B
5	Mechanical Shock	100G's peak for 6 milli seconds	MIL-STD-202, Method 213 Test Condition I
6	Vibration	10-55 Hz	MIL-STD-202F, Method 201A
7	Moisture Resistance	90-98% RH, Heat: 65°C	MIL-STD-202, Method 106,High Humidity
8	Salt spray	48hrs	MIL-STD-202F, Method 101D Test Condition B

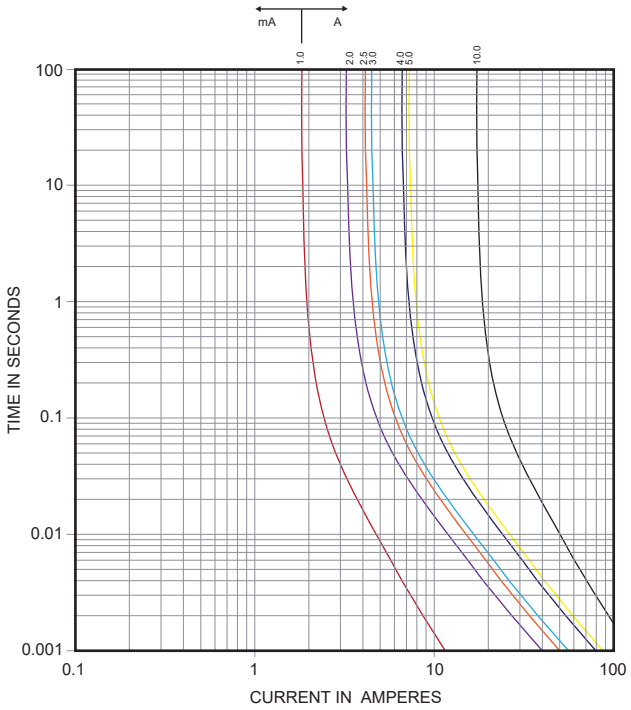
Environmental Characteristic

- Operating temperature range : -55℃ to 125℃
- Derating depicted in this in addition to the standard derating of 25% for continuous operation.

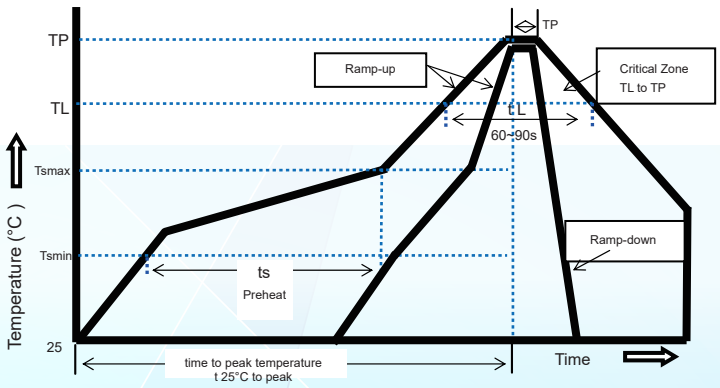
Temperature Rerating Curve



Average Time-Current Curve



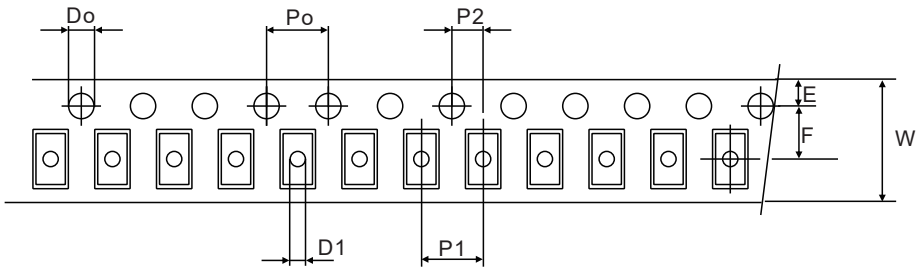
Soldering Parameters

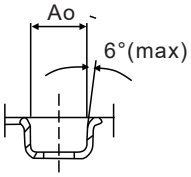


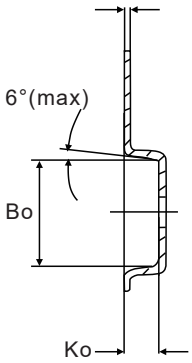
Reflow Condition		Pb-Free assembly
Pre heat	Temperature Min Ts(min)	150℃
	Temperature Max Ts(man)	200℃
	Time Min to Max (Ts)	60-120 secs
Reflow	Temperature (TL)(Liquidus)	217°C
	Time Max (TL)	60-90 seconds
Average ramp up rate (Liquidus Temp(TL) to peak)		5°C/seconds max
Ts(max)to TL-Ramp-up Rate		5°C/seconds max
Peak Temperature(Tp)		260 + 0/-5°C
Time within 5°C of actual peak Temperature(tp)		20-40seconds
Ramp-dowm Rate		5°C/seconds max
Time 5°C ot peak Temperature(tp)		8 minutes max
Do not exceed		260°C

Packing

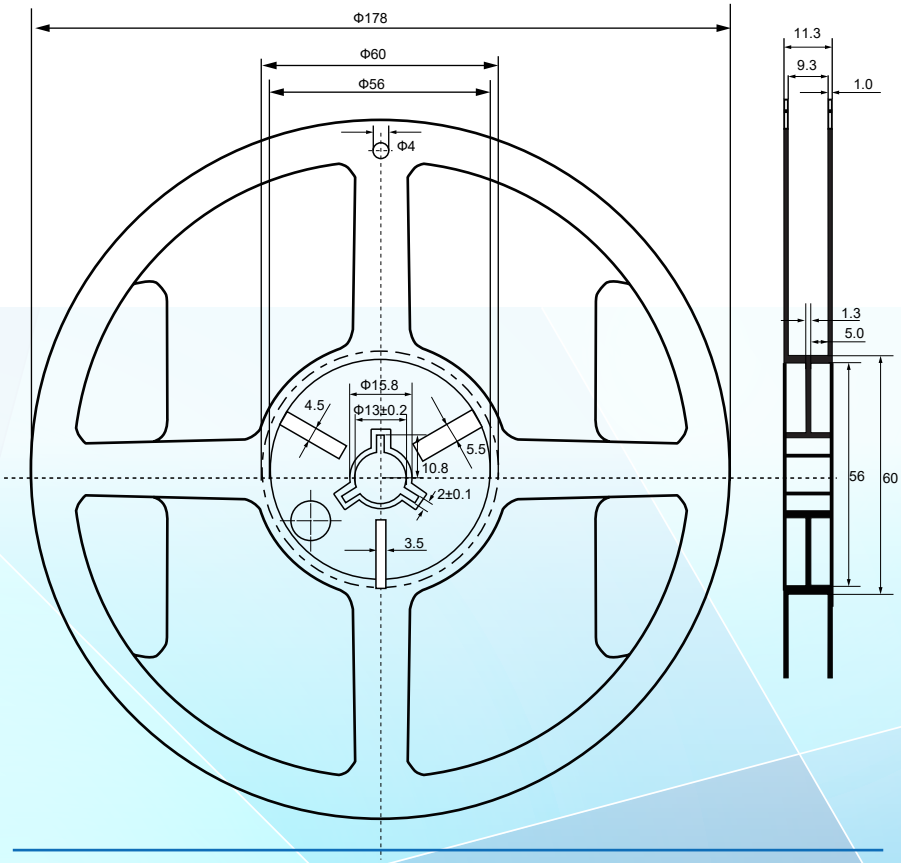
Packaging Option	Quantity
8mm Tape and Reel	1500







Symbol	A0	B0	K0	P0	P1	P2
Spec	1.80±0.10	3.50±0.10	1.27±0.10	4.00±0.10	4.00±0.10	2.00±0.10
Symbol	E	F	D0	D1	W	T
Spec	1.75±0.10	3.50±0.10	1.50±0.10	1.00(max)	8.00±0.10	0.25±0.05



Part Numbering