

Performance Specification

Model						Maximum		Resistance	
	V _{max}	I _{max}	I _{hold}	I _{trip}	P _d	Time To Trip			
			@25°C	@25°C	Typ.	Current	Time	R _{i min}	R _{1max}
	(V _{dc})	(A)	(A)	(A)	(W)	(A)	(Sec)	(Ω)	(Ω)
JK-SMD2920-030SF	60	100	0.30	0.60	1.5	1.5	3.0	0.600	4.800
JK-SMD2920-050SF	60	100	0.50	1.00	1.5	2.5	4.0	0.180	1.400
JK-SMD2920-075SF	33	100	0.75	1.50	1.5	8.0	0.3	0.100	1.000
JK-SMD2920-110SF	33	100	1.10	2.20	1.5	8.0	0.5	0.065	0.410
JK-SMD2920-125SF	33	100	1.25	2.50	1.5	8.0	2.0	0.050	0.250
JK-SMD2920-150SF	33	100	1.50	3.00	1.5	8.0	2.0	0.035	0.230
JK-SMD2920-185SF	33	100	1.85	3.70	1.5	8.0	2.5	0.030	0.150
JK-SMD2920-200SF	16	100	2.00	4.00	1.5	8.0	4.5	0.020	0.120
JK-SMD2920-250SF	16	100	2.50	5.00	1.5	8.0	16.0	0.020	0.085
JK-SMD2920-260SF	6	100	2.60	5.20	1.5	8.0	10.0	0.014	0.075
JK-SMD2920-300SF/6V	6	40	3.00	6.00	1.5	8.0	20.0	0.012	0.048
JK-SMD2920-300SF	16	100	3.00	6.00	1.5	8.0	20.0	0.012	0.048

V max = Maximum operating voltage device can withstand without damage at rated current (I max).

I max = Maximum fault current device can withstand without damage at rated voltage (V max).

I hold = Hold Current. Maximum current device will not trip in 25°C still air.

I trip = Trip Current. Minimum current at which the device will always trip in 25°C still air.

P d = Power dissipation when device is in the tripped state in 25°C still air environment at rated voltage.

R i min/max = Minimum/Maximum device resistance prior to tripping at 25°C.

R1max = Maximum device resistance is measured one hour post reflow.

CAUTION : Operation beyond the specified ratings may result in damage and possible arcing and flame.

Environmental Specifications

Test	Conditions	Resistance change
Passive aging	+85°C, 1000 hrs.	±5% typical
Humidity aging	+85°C, 85% R.H. , 168 hours	±5% typical
Thermal shock	+85°C to -40°C, 20 times	±33% typical
Resistance to solvent	MIL-STD-202, Method 215	No change
Vibration	MIL-STD-202, Method 201	No change
Ambient operating conditions : - 40 °C to +85 °C		
Maximum surface temperature of the device in the tripped state is 125 °C		

Agency Approval and Environmental Compliance

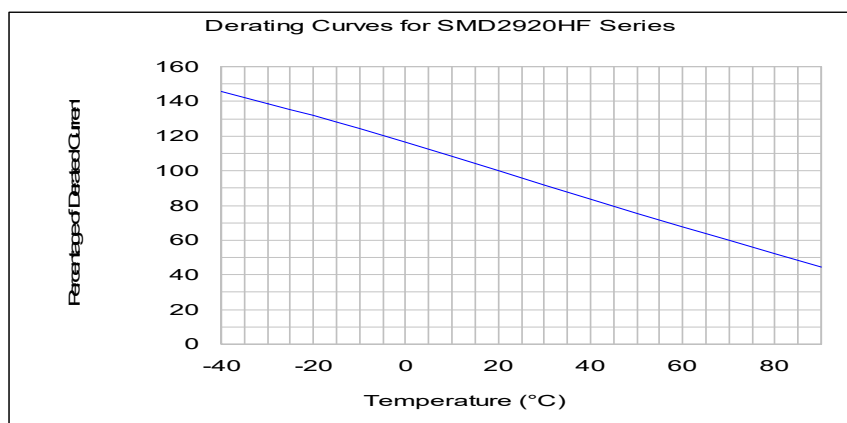
Agency	File Number	Regulation	Standard
UL	pending		2002/95/EC
TUV	pending		EN14582

Thermal Derating Chart

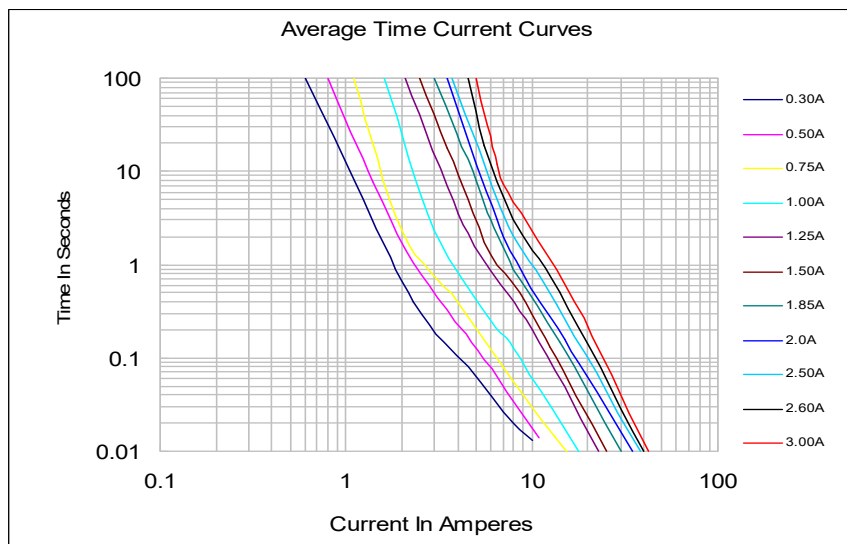
Recommended Hold Current(A) at Ambient Temperature(°C)

Model	Ambient Operation Temperature								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
JK-SMD2920-030SF	0.45	0.40	0.35	0.30	0.25	0.23	0.20	0.17	0.14
JK-SMD2920-050SF	0.76	0.67	0.59	0.50	0.42	0.38	0.33	0.29	0.23
JK-SMD2920-075SF	1.13	1.01	0.88	0.75	0.62	0.56	0.50	0.44	0.34
JK-SMD2920-110SF	1.66	1.47	1.29	1.10	0.91	0.83	0.73	0.64	0.50
JK-SMD2920-125SF	1.89	1.68	1.46	1.25	1.04	0.94	0.83	0.73	0.56
JK-SMD2920-150SF	2.27	2.01	1.76	1.50	1.25	1.13	1.00	0.87	0.74
JK-SMD2920-185SF	2.80	2.47	2.17	1.85	1.54	1.39	1.22	1.07	0.85
JK-SMD2920-200SF	3.02	2.68	2.34	2.00	1.66	1.50	1.32	1.16	0.90
JK-SMD2920-250SF	3.78	3.35	2.93	2.50	2.08	1.88	1.65	1.45	1.13
JK-SMD2920-260SF	3.64	3.25	2.91	2.60	2.26	2.08	1.95	1.74	1.13
JK-SMD2920-300SF/6V	4.53	4.02	3.51	3.00	2.52	2.26	1.99	1.75	1.34

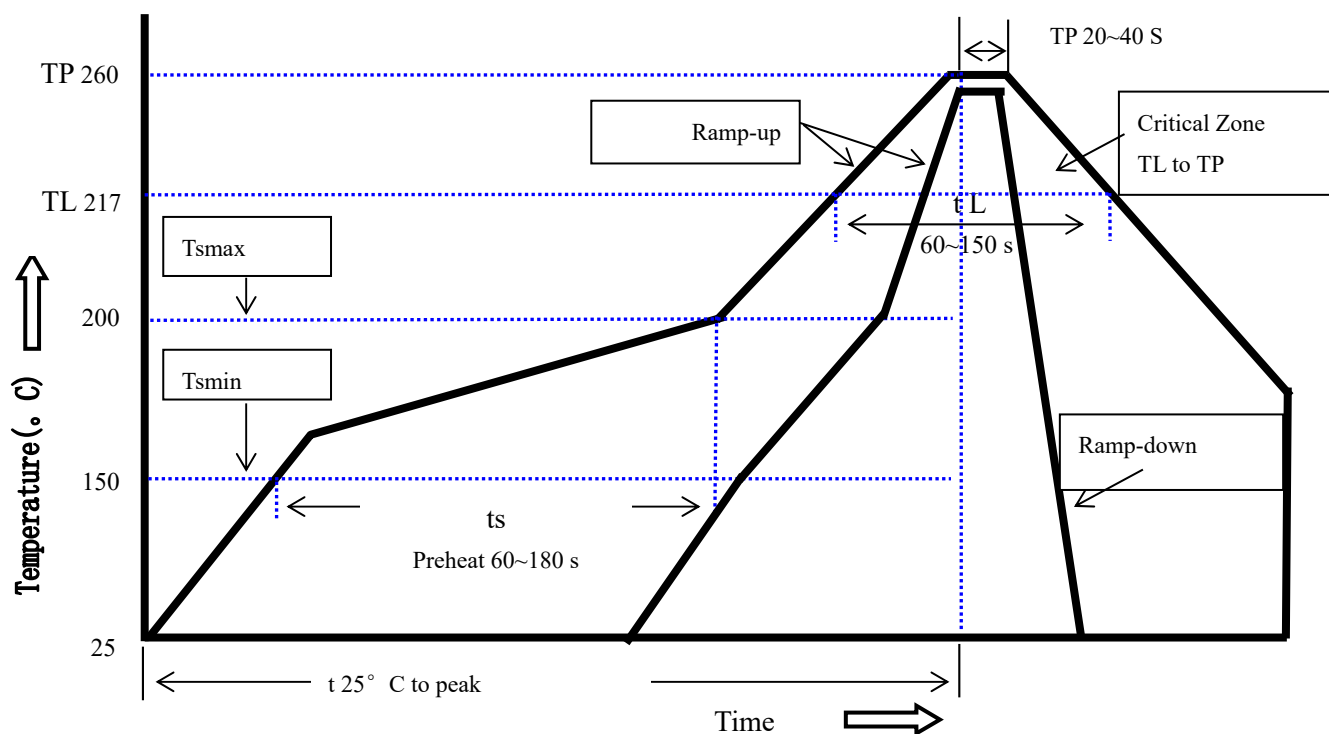
Thermal Derating Curve



Average Time-Current Curve



Soldering Parameters



Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate(Ts max to T p)	3°C/second max.
Preheat	
-Temperature Min(Ts min)	150°C
-Temperature Max(Ts max)	200°C
-Time(Ts min to Ts max)	60~180 seconds
Time maintained above:	
-Temperature(TL)	217°C
-Time(tL)	60~150 seconds
Peak Temperature(Tp)	260°C
Ramp-Down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max
Storage Condition	0°C~35°C, ≤70%RH

Recommended reflow methods: IR, vapor phase oven, hot air oven, N2 environment for lead-free

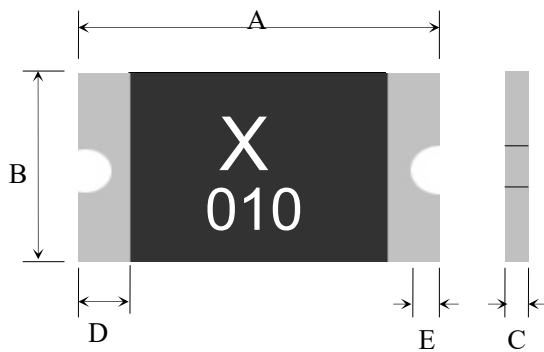
Recommended maximum paste thickness is 0.25mm

Devices can be cleaned using standard industry methods and solvents.

Note 1: All temperature refer to topside of the package, measured on the package body surface.

Note 2: If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Physical Dimensions(mm.)



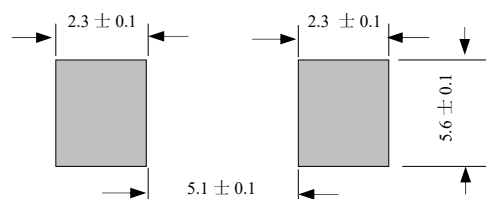
Model	A		B		C		D	E
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Min.
JK-SMD2920-030SF	6.73	7.98	4.80	5.44	0.60	1.30	0.30	0.25
JK-SMD2920-050SF	6.73	7.98	4.80	5.44	0.60	1.30	0.30	0.25
JK-SMD2920-075SF	6.73	7.98	4.80	5.44	0.60	1.30	0.30	0.25
JK-SMD2920-110SF	6.73	7.98	4.80	5.44	0.40	1.00	0.30	0.25
JK-SMD2920-125SF	6.73	7.98	4.80	5.44	0.40	0.90	0.30	0.25
JK-SMD2920-150SF	6.73	7.98	4.80	5.44	0.40	0.90	0.30	0.25
JK-SMD2920-185SF	6.73	7.98	4.80	5.44	0.30	0.90	0.30	0.25
JK-SMD2920-200SF	6.73	7.98	4.80	5.44	0.30	0.90	0.30	0.25
JK-SMD2920-250SF	6.73	7.98	4.80	5.44	0.30	0.90	0.30	0.25
JK-SMD2920-260SF	6.73	7.98	4.80	5.44	0.30	0.90	0.30	0.25
JK-SMD2920-300SF/6V	6.73	7.98	4.80	5.44	0.60	1.30	0.30	0.25

Termination Pad Characteristics

Terminal pad materials: Tin-plated Nickel-Copper

Terminal pad solder ability: Meets EIA specification RS186-9E and ANSI/J-STD-002 Category 3.

Recommended Pad Layout (mm.)



Packaging Quantity

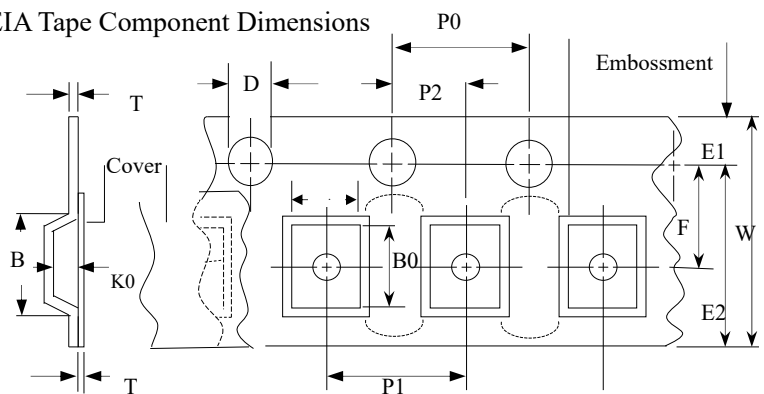
Part Number	Quantity
JK-SMD2920 Series	2,000 pcs/reel

Tape & reel packaging per EIA481-1

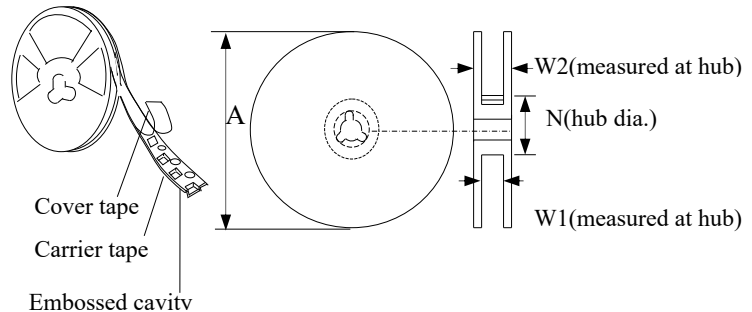
Tape And Reel Specifications (mm)

Governing Specifications	EIA 481-2
W	16.00 ± 0.3
P0	4.00 ± 0.10
P1	8.00 ± 0.10
P2	2.00 ± 0.05
A0	5.70 ± 0.10
B0	8.00 ± 0.10
B1max.	12.10
D0	1.50 + 0.1, -0
F	7.50 ± 0.05
E1	1.75 ± 0.10
E2min.	14.25
T	0.60
T1max.	0.10
K0	0.80 ± 0.1
Leader min.	390
Trailer min.	160
Reel Dimensions	
A max.	178
N min.	60
W1	16.40 ± 0.5
W2	22.40

EIA Tape Component Dimensions



EIA Reel Dimensions



Storage And Handling

- Storage conditions: 35°C max, 70% R.H.
- Devices may not meet specified performance if storage conditions are exceeded.

Part Number System

JK- SMD2920 □□□ S F □□ V

special voltage Rating(Optional)

Lead-Free

Tin-plated Nickel-Copper

Device Dimensions: Length/width(Unit: 1/100 inch) Size 7555mm / 2920inch

JKSEMI

Cross Reference

JKSEMI	Cross Reference				
	TYCO/Raychem	Littelfuse	Bourns / Multifuse®	Polytronics / EVERFUSE®	SEA-LAND
JK-SMD2920-030SF	SMD030F	2920L030	–	SMD2920P030TF	SMD030L
JK-SMD2920-050SF	SMD050F	2920L050	–	SMD2920P050TF	SMD050L
JK-SMD2920-075SF	SMD075F	2920L075	–	SMD2920P075TF	SMD075L
JK-SMD2920-110SF	SMD100F	2920L100	–	SMD2920P100TF	SMD100L
JK-SMD2920-125SF	SMD125F	2920L125	–	SMD2920P125TF	SMD125L
JK-SMD2920-150SF	–	2920L150	–	SMD2920P150TF	SMD150L
JK-SMD2920-185SF	–	2920L185	MF-LSMF185/33X	SMD2920P185TF	SMD185L
JK-SMD2920-200SF	–	2920L200	–	SMD2920P200TF	SMD200L
JK-SMD2920-250SF	–	2920L250	–	SMD2920P250TF	SMD250L
JK-SMD2920-260SF	SMD260F	2920L260	MF-LSMF260X	SMD2920P260TF	SMD260L
JK-SMD2920-300SF/6V	SMD300F	2920L300	MF-LSMF300X	–	SMD300L-6
JK-SMD2920-300SF	SMD300F/15	2920L300/15	MF-LSMF300/24X	SMD2920P300TF/15	SMD300L

“Raychem” is a registered trademark of Tyco Electronics.

“Littelfuse” is a registered trademark of Littelfuse

“Multifuse” is a registered trademark of bourns,Inc.

“EVERFUSE” is a registered trademark of Polytronics Technology Corp.

“SEA-LAND” is a registered trademark of Sea-Land electronic corp.

Website: <http://www.jksemi.com>

For additional information, please contact your local Sales Representative.

©Copyright 2016, jksemi