

APPROVAL SHEET

MODEL NO.: _____

CUSTOMER:

CUSTOMER'S APPROVAL:

AUTHORIZED SIGNATURE/STAMP

DATE

MANUFACTURER:

Submitted by:

Approved by:

Date:

Performance Specification

Model	V _{max} (Vdc)	I _{max} (A)	I _{hold} (A)	I _{trip} (A)	P _d Typ. (W)	Maximum Time To Trip		Resistance		
						Current (A)	Time (Sec)	Ri min (Ω)	Ri max (Ω)	R1 max (Ω)
						16R020	16	40	0.20	0.4
16R025	16	40	0.25	0.5	0.35	1.5	4.5	0.500	0.950	1.450
16R030	16	40	0.30	0.6	0.35	1.5	6.0	0.400	0.700	1.100
16R040	16	40	0.40	0.8	0.4	2.0	6.0	0.240	0.600	0.900
16R050	16	40	0.50	1.0	0.5	2.5	6.0	0.230	0.450	0.730
16R065	16	40	0.65	1.3	0.5	4.0	4.0	0.160	0.350	0.560
16R075	16	40	0.75	1.5	0.5	4.0	4.0	0.110	0.220	0.360
16R090	16	40	0.90	1.8	0.6	4.5	3.0	0.080	0.170	0.255
16R110	16	40	1.10	2.2	0.7	5.5	5.0	0.070	0.140	0.235
16R135	16	40	1.35	2.7	0.8	7.00	6.0	0.060	0.120	0.180
16R160	16	40	1.60	3.2	0.9	8.00	8.0	0.040	0.070	0.105
16R185	16	40	1.85	3.7	1.2	9.25	10.0	0.030	0.068	0.102
16R200	16	40	2.00	4.0	1.5	10	8.0	0.025	0.060	0.090
16R250	16	40	2.50	5.0	1.5	12.5	10.0	0.025	0.055	0.075
16R300	16	100	3.00	6.0	2.3	15.0	2.0	0.0200	0.065	0.098
16R400	16	100	4.00	8.0	2.4	20.0	3.5	0.019	0.040	0.060
16R500	16	100	5.00	10.0	2.6	25.0	3.6	0.013	0.023	0.034
16R600	16	100	6.00	12.0	2.8	30.0	5.8	0.010	0.019	0.028
16R700	16	100	7.00	14.0	3.0	35.0	8.0	0.007	0.013	0.022
16R800	16	100	8.00	16.0	3.0	40.0	9.0	0.0055	0.0120	0.0180
16R900	16	100	9.00	18.0	3.3	45.0	12.0	0.0047	0.0095	0.0145
16R1000	16	100	10.00	20.0	3.5	50.0	12.5	0.0040	0.0073	0.0110
16R1100	16	100	11.00	22.00	3.7	55.0	13.5	0.0035	0.0064	0.0096
16R1200	16	100	12.00	24.00	4.2	60.0	16.0	0.0033	0.0060	0.0090
16R1400	16	100	14.00	28.00	4.6	70.0	20.0	0.0025	0.0047	0.0070

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.

Ri 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.

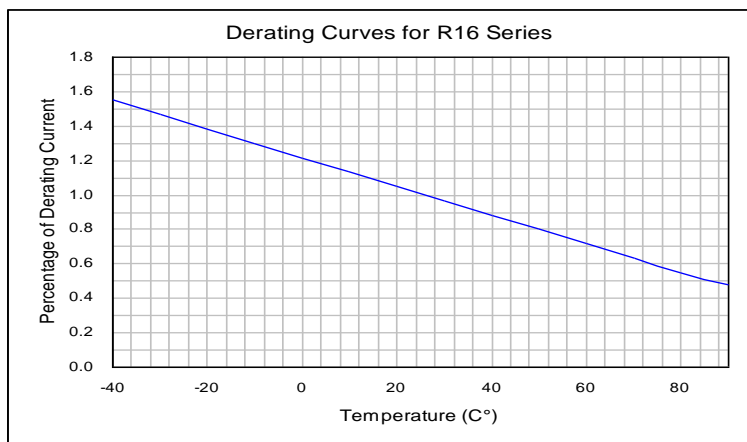
Environmental Specifications

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		

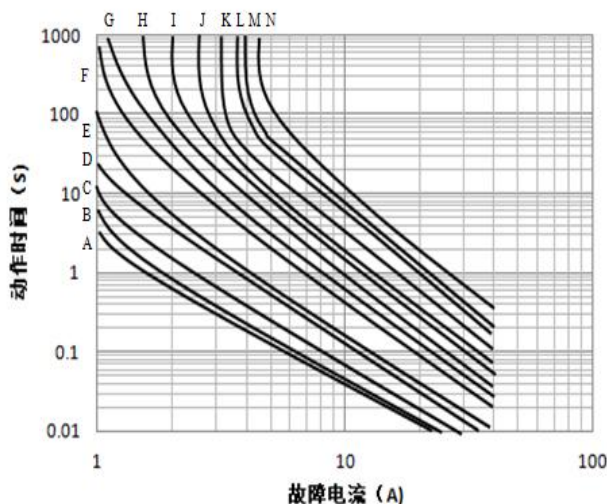
Agency Approval and Environmental Compliance

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

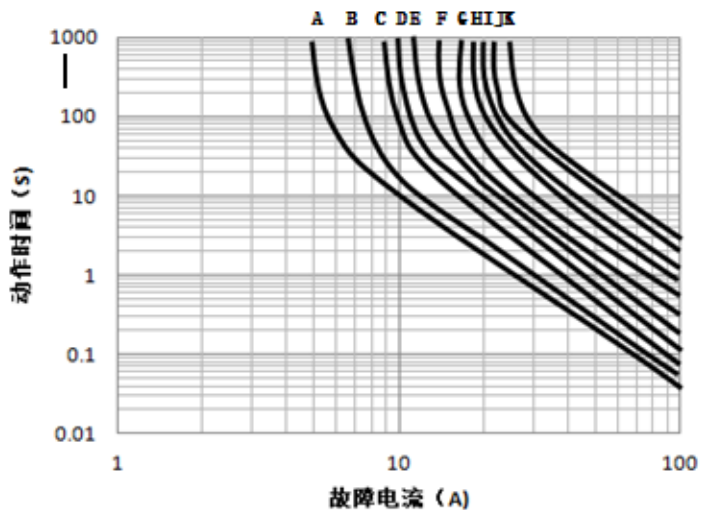
Thermal Derating Curve



Average Time-Current Curve



- A=16-020
- B=16-025
- C=16-030
- D=16-040
- E=16-050
- F=16-065
- G=16-075
- H=16-090
- I=16-110
- J=16-135
- K=16-160
- L=16-185
- M=16-200
- N=16-250



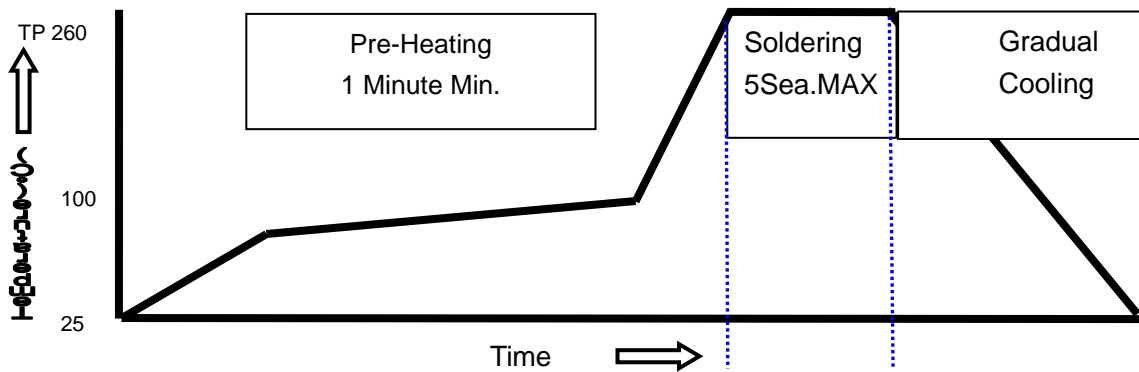
- A=16-300 G=16-900
- B=16-400 H=16-1000
- C=16-500 I=16-1100
- D=16-600 J=16-1200
- E=16-700 K=16-1400
- F=16-800

I_{hold} Versus Temperature

Model	Maximum ambient operating temperature (T _{mao}) vs. hold current (I _{hold})								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
16R020	0.35	0.29	0.24	0.20	0.15	0.13	0.11	0.09	0.06
16R025	0.40	0.34	0.30	0.25	0.22	0.20	0.18	0.15	0.12
16R030	0.50	0.42	0.38	0.30	0.24	0.22	0.18	0.14	0.10
16R040	0.62	0.54	0.48	0.40	0.34	0.30	0.28	0.24	0.20
16R050	0.83	0.71	0.60	0.50	0.43	0.38	0.32	0.27	0.24
16R065	1.05	0.90	0.78	0.65	0.58	0.52	0.47	0.41	0.33
16R075	1.05	0.95	0.85	0.75	0.65	0.60	0.55	0.50	0.43
16R090	1.40	1.25	1.10	0.90	0.75	0.69	0.65	0.60	0.50
16R110	1.75	1.52	1.33	1.10	0.99	0.90	0.80	0.73	0.63
16R135	2.15	1.94	1.70	1.35	1.20	1.14	1.00	0.90	0.81
16R160	2.49	2.21	1.94	1.60	1.42	1.31	1.19	1.03	0.88
16R185	2.87	2.59	2.28	1.85	1.63	1.52	1.33	1.21	1.05
16R200	3.05	2.69	2.35	2.00	1.73	1.63	1.42	1.31	1.15
16R250	3.82	3.44	3.03	2.50	2.17	2.00	1.81	1.59	1.39
16R300	4.40	4.00	3.60	3.00	2.60	2.40	2.10	1.90	1.40
16R400	5.90	5.30	4.80	4.00	3.50	3.20	2.80	2.50	1.90
16R500	7.30	6.60	6.00	5.00	4.40	4.00	3.60	3.10	2.40
16R600	8.80	8.00	7.20	6.00	5.20	4.80	4.20	3.80	2.80

16R700	10.30	9.30	8.40	7.00	6.20	5.60	5.00	4.40	3.30
16R800	11.70	10.70	9.60	8.00	6.90	6.40	5.60	5.10	3.70
16R900	13.20	11.90	10.70	9.00	7.90	7.20	6.40	5.60	4.20
16R1000	14.70	13.30	12.00	10.00	8.70	8.00	7.00	6.30	4.70
16R1100	16.10	14.60	13.10	11.00	9.70	8.80	7.80	6.90	5.20
16R1200	17.60	16.00	14.40	12.00	10.40	9.60	8.40	7.60	5.60
16R1400	20.50	18.70	16.80	14.00	12.10	11.20	9.80	8.90	6.50

Soldering Parameters

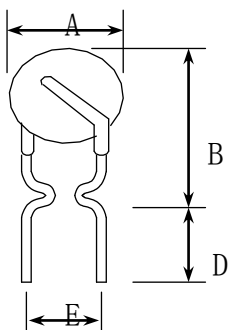


WAVE SOLDERING INFORMATION

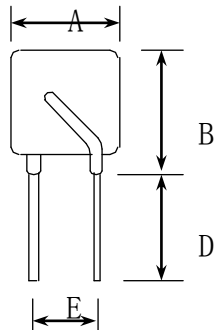
Pre-Heating Zone	Max. ramping rate should not exceed 4°C/Sec.
Soldering Zone	Max. solder temperature should not exceed 260°C
Cooling Zone	Cooling by natural convection in air.

© Specifications are subject to change without notice.

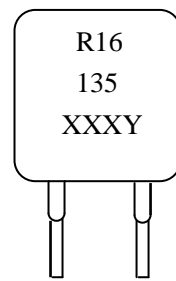
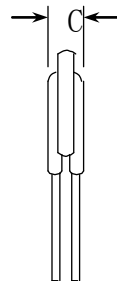
Physical Dimensions(mm.)



1 型



2 型



R = 商標
 16 = 16 Vrms 工作電壓
 135 = 1.35A 保持電流
 XXX = 日期
 Y = 代碼

Model	A	B	C	D	E	Lead	
	Max.	Max.	Max.	Min.	Typ.	Style	直径 (φ)
16R020	4.0	10.5	3	7.6	5.1	1	0.4
16R025	4.0	10.5	3	7.6	5.1	1	0.4
16R030	4.0	10.5	3	7.6	5.1	1	0.4
16R040	4.5	11.0	3	7.6	5.1	1	0.4
16R050	6.4	12.4	3	7.6	5.1	1	0.5
16R065	6.4	12.4	3	7.6	5.1	1	0.5
16R075	6.4	12.4	3	7.6	5.1	1	0.5
16R090	6.4	12.4	3	7.6	5.1	1	0.5
16R110	7.5	14.2	3	7.6	5.1	1	0.5
16R135	8.9	14.5	3	7.6	5.1	1	0.5
16R160	9.2	14.5	3	7.6	5.1	1	0.5
16R185	9.7	15.5	3	7.6	5.1	1	0.6
16R200	10.7	16.0	3	7.6	5.1	1	0.6
16R250	11.7	16.5	3	7.6	5.1	1	0.6
16R300	9.2	12.7	3	7.6	5.1	2	0.8
16R400	11.1	13.9	3	7.6	5.1	2	0.8
16R500	11.6	15.5	3	7.6	5.1	2	0.8
16R600	12.0	19.8	3	7.6	5.1	2	0.8
16R700	13.0	21.7	3	7.6	5.1	2	0.8
16R800	15.0	21.5	3	7.6	5.1	2	0.8
16R900	14.7	21.4	3	7.6	5.1	2	0.8
16R1000	17.2	25.5	3	7.6	5.1	2	0.8
16R1100	18.2	25.5	3	7.6	5.1	2	0.8
16R1200	18.2	28.5	3.6	7.6	10.2	2	0.8
16R1400	28.6	28.7	3.4	7.6	10.2	2	0.8

PHYSICAL SPECIFICATIONS :

Materials : Leads 16R020~ 040: Tin-platedcopper-cladsteel,, 0.205mm2(24AWG) Φ0.40mm(0.020 in).

16R050~ 160: Tin-platedcopper-cladsteel,, 0.205mm2(24AWG) Φ0.50mm(0.020 in).

16R185: Tin-plated copper, 0.205mm2(24AWG) Φ0.60mm(0.020 in).

16R200-250: Tin-plated copper,,0.205mm2(24AWG),Φ0.60mm(0.020in).

16R300~1400 :Tin-plated copper,,0.205mm2(24AWG),Φ0.80mm(0.020in).

Lead Solderability : MIL-STD-202, Method 208E

Device Labeling : Device is marked with Logo, amperage rating , voltage rating & date code.

Packaging Quantity

16	135	U	Model	Reel Q'ty	Bag Q'ty
Radial type	Hold	U= Bulk	16R020-1400	-	500
16V	Current(A)	packaged			

Tape & Reel packaging per EIA468-B standard.