

## APPROVAL SHEET

MODEL NO.: \_\_\_\_\_

CUSTOMER:

CUSTOMER'S APPROVAL:

AUTHORIZED SIGNATURE/STAMP

DATE

MANUFACTURER:

The Fourth Industrial Zone, Luokeng Village, Xiaotie District, Xiaojinkou Town, Huizhou City, Guangdong Province, China

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Submitted by:

Approved by:

Date:

**Performance Specification**

Model	I <sub>hold</sub> (A)	I <sub>trip</sub> (A)	V <sub>max</sub> (Vdc)	I <sub>max</sub> (A)	P <sub>d</sub> Typ. (W)	Maximum Time To Trip		Resistance		
						Current (A)	Time (Sec)	R <sub>i</sub> min. (Ω)	R <sub>i</sub> max. (Ω)	R <sub>1</sub> max (Ω)
265R020	0.02	0.04	265	1.0	0.6	0.06	25.0	60.0	150.0	200.0
265R030	0.03	0.06	265	1.0	0.6	0.09	20	35.0	90.0	120.0
265R040	0.04	0.08	265	1.0	0.7	0.20	0.12	25.0	65.0	90.0
265R050	0.05	0.10	265	1.0	0.7	0.15	15.0	22.0	55.0	75.0
265R060	0.06	0.12	265	1.2	0.8	0.18	15.0	18.0	45.0	60.0
265R080	0.08	0.16	265	1.2	0.8	0.24	15.0	11.0	22.0	33.0
265R120	0.12	0.24	265	1.2	1.0	1.0	0.75	6.0	12.0	16.0
265R145	0.145	0.29	265	3.0	1.0	1.00	1.50	4.5	9.0	14.0
265R160	0.16	0.32	265	2.0	1.4	0.48	25.0	3.5	7.8	10.4
265R180C	0.18	0.65	265	10	1.5	3.0	0.5	1.6	3.2	4.0
265R180S	0.18	0.65	265	10	1.5	3.0	0.5	1.6	3.2	4.0
265R200C	0.20	0.40	265	3.0	1.5	0.60	25.0	3.0	6.5	8.0
265R200S	0.20	0.40	265	3.0	1.5	0.60	25.0	3.0	6.5	8.0
265R250	0.25	0.50	265	3.5	1.5	0.75	20.0	2.2	5.0	6.0
265R300	0.30	0.60	265	4.5	1.7	0.90	20.0	1.8	4.0	4.8
265R330	0.33	0.66	265	4.5	1.7	0.99	20.0	1.6	3.6	4.3
265R400	0.40	0.80	265	5.5	2.0	1.20	25.0	1.35	3.00	3.6
265R500	0.50	1.0	265	6.5	2.5	1.50	25.0	0.90	2.00	2.4
265R550	0.55	1.1	265	7.0	2.5	1.65	25.0	0.80	1.65	2.0
265R600	0.60	1.2	265	6.0	2.5	1.80	25.0	0.75	1.50	1.8
265R650	0.65	1.3	265	6.5	2.6	1.95	30.0	0.65	1.30	1.6
265R750	0.75	1.5	265	7.5	2.6	2.25	30.0	0.55	1.10	1.3
265R800	0.80	1.6	265	8.0	2.7	2.40	30.0	0.50	1.00	1.2
265R900	0.90	1.8	265	9.0	2.8	2.70	35.0	0.45	0.90	1.1
265R1000C	1.00	2.0	265	10.0	2.9	3.00	35.0	0.37	0.75	0.90
265R1000S	1.00	2.0	265	10.0	2.9	3.00	35.0	0.37	0.75	0.90
265R1100	1.10	2.2	265	10.0	3.1	3.30	35.0	0.33	0.66	0.80
265R1250C	1.25	2.5	265	10.0	3.3	3.75	40.0	0.27	0.55	0.66
265R1250S	1.25	2.5	265	10.0	3.3	3.75	40.0	0.27	0.55	0.66
265R1350	1.35	2.7	265	10.0	3.5	4.05	40.0	0.25	0.50	0.60
265R1600	1.60	3.2	265	10.0	3.9	4.80	40.0	0.20	0.40	0.48
265R1850	1.85	3.7	265	10.0	4.3	5.55	50.0	0.165	0.33	0.40
265R2000	2.00	4.0	265	10.0	4.5	6.00	50.0	0.135	0.27	0.33

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

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

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

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

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

# HuiZhou DaRong Electronic Technology CO.,LTD

## 265R HF Series PTC Devices

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.

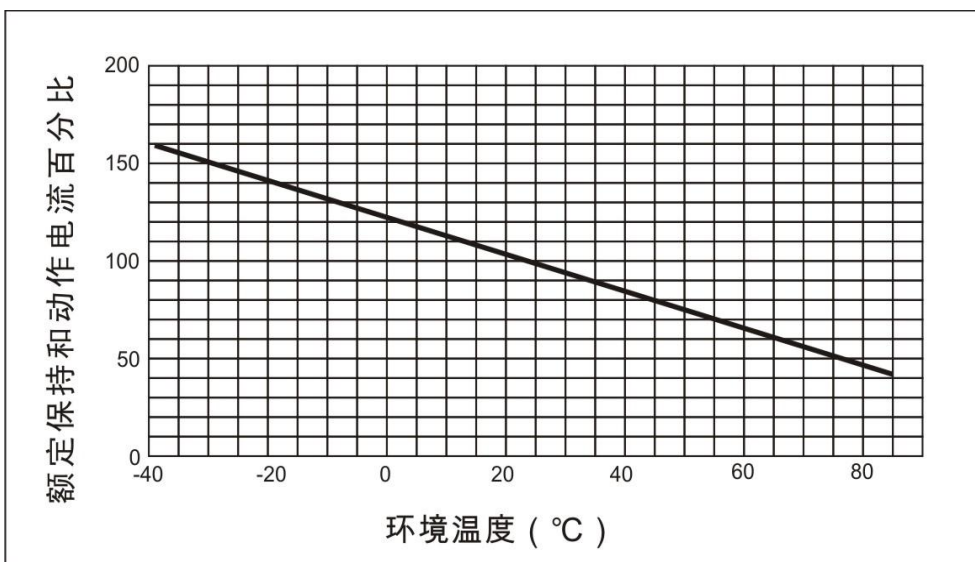
### Environmental Specifications

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		

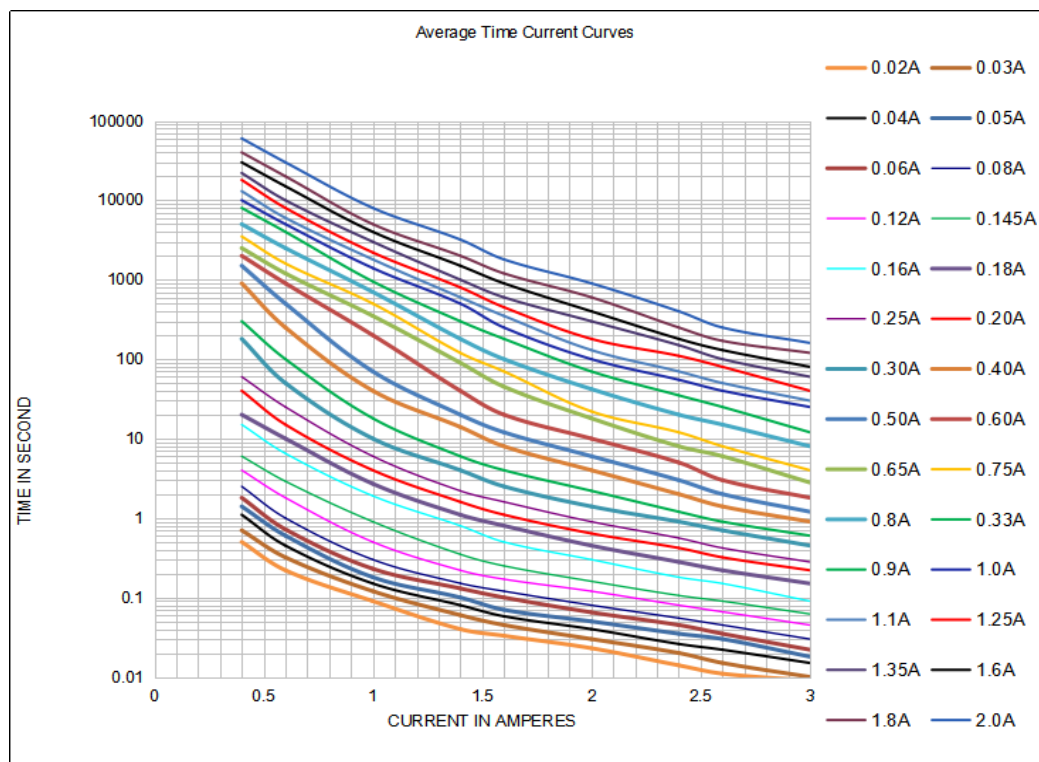
### Agency Approval and Environmental Compliance

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

### Thermal Derating Curve



**Average Time-Current Curve**

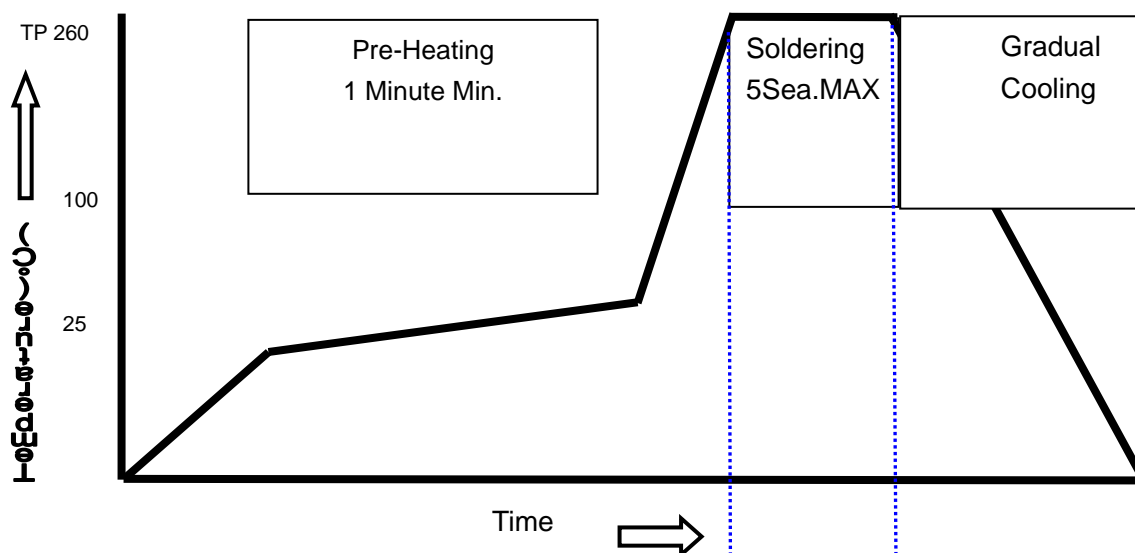


**Ihold Versus Temperature**

型號	最高環境溫度和保持電流								
	-40°C	-20°C	0°C	25°C	40°C	50°C	60°C	70°C	85°C
265R020	0.031	0.027	0.024	0.02	0.016	0.015	0.013	0.011	0.008
265R030	0.047	0.041	0.036	0.03	0.025	0.022	0.019	0.017	0.012
265R040	0.062	0.055	0.048	0.04	0.033	0.029	0.026	0.022	0.016
265R050	0.078	0.069	0.060	0.05	0.041	0.037	0.032	0.028	0.021
265R060	0.093	0.082	0.070	0.06	0.049	0.044	0.038	0.033	0.025
265R080	0.124	0.110	0.095	0.08	0.066	0.058	0.051	0.044	0.033
265R120	0.186	0.164	0.143	0.12	0.098	0.088	0.077	0.066	0.049
265R145	0.225	0.199	0.172	0.145	0.119	0.106	0.093	0.080	0.060
265R160	0.248	0.219	0.190	0.16	0.131	0.117	0.102	0.088	0.064
265R180C	0.279	0.247	0.213	0.180	0.147	0.131	0.115	0.099	0.074
265R180S	0.279	0.247	0.213	0.180	0.147	0.131	0.115	0.099	0.074
265R200C	0.310	0.274	0.238	0.20	0.164	0.146	0.128	0.110	0.082
265R200S	0.310	0.274	0.238	0.20	0.164	0.146	0.128	0.110	0.082
265R250	0.39	0.34	0.30	0.25	0.21	0.18	0.16	0.14	0.10
265R300	0.47	0.41	0.36	0.30	0.25	0.22	0.19	0.17	0.12
265R330	0.51	0.45	0.39	0.33	0.27	0.24	0.21	0.18	0.14
265R400	0.62	0.55	0.48	0.40	0.33	0.29	0.26	0.22	0.16
265R500	0.78	0.69	0.60	0.50	0.41	0.37	0.32	0.28	0.21
265R550	0.85	0.75	0.66	0.55	0.45	0.40	0.35	0.30	0.23
265R600	0.93	0.82	0.71	0.60	0.49	0.44	0.38	0.33	0.25
265R650	1.01	0.89	0.77	0.65	0.53	0.47	0.42	0.36	0.27

265R750	1.16	1.03	0.89	0.75	0.62	0.55	0.48	0.41	0.31
265R800	1.24	1.10	0.95	0.80	0.66	0.58	0.51	0.44	0.33
265R900	1.40	1.23	1.07	0.90	0.74	0.66	0.58	0.50	0.37
265R1000C	1.55	1.37	1.19	1.00	0.82	0.73	0.64	0.55	0.41
265R1000S	1.55	1.37	1.19	1.00	0.82	0.73	0.64	0.55	0.41
265R1100	1.71	1.51	1.31	1.10	0.90	0.80	0.70	0.61	0.45
265R1250C	1.94	1.71	1.49	1.25	1.03	0.91	0.80	0.69	0.51
265R1250S	1.94	1.71	1.49	1.25	1.03	0.91	0.80	0.69	0.51
265R1350	2.09	1.85	1.61	1.35	1.11	0.99	0.86	0.74	0.55
265R1600	2.48	2.19	1.90	1.60	1.31	1.17	1.02	0.88	0.66
265R1850	2.87	2.53	2.20	1.85	1.52	1.35	1.18	1.02	0.76
265R2000	3.10	2.74	2.38	2.00	1.64	1.46	1.28	1.10	0.82

## Soldering Parameters

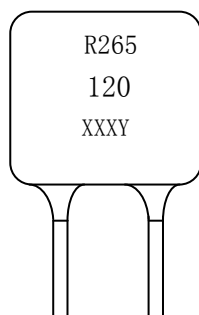
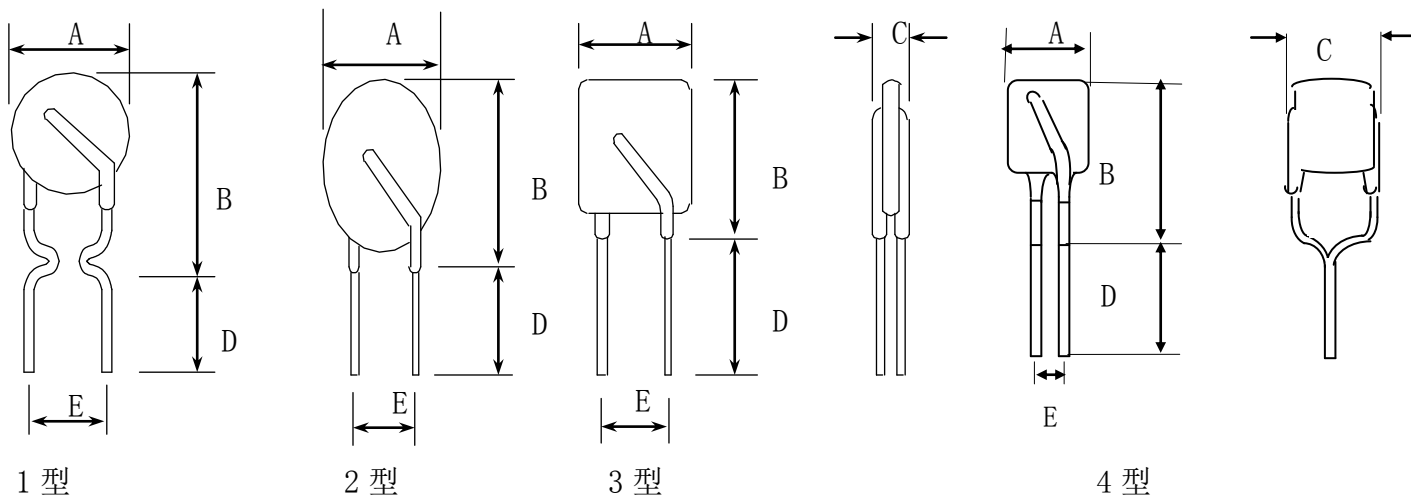


### WAVE SOLDERING INFORMATIONS

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.

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**Physical Dimensions(mm.)**



R= Trademark  
 265 = Radial type 265 V  
 120 = 0.12A hold current  
 XXX=日期  
 Y=代碼

型號	A	B	C	D	E	Lead	
	Max.	Max.	Max.	Min.	Typ.	Style	直徑(Φ)
265R020	6.0	8.7	4.6	7.6	5.1	1	0.5
265R030	6.0	8.7	4.6	7.6	5.1	1	0.5
265R040	6.0	9.3	4.6	7.6	5.1	1	0.5
265R050	6.0	9.3	4.6	7.6	5.1	1	0.5
265R060	6.0	10.0	4.6	7.6	5.1	2	0.6
265R080	6.0	10.0	4.6	7.6	5.1	1	0.6
265R120	7.2	11.2	4.6	7.6	5.1	4	0.6
265R145	7.0	11.0	4.6	7.6	5.1	4	0.6
265R160	9.3	12.8	4.6	7.6	5.1	1	0.6
265R180C	9.5	13.5	4.6	7.6	5.1	1	0.6
265R180S	8.8	12.8	4.6	7.6	5.1	4	0.6
265R200C	10.0	13.5	4.6	7.6	5.1	1	0.6
265R200S	9.3	12.8	4.6	7.6	5.1	4	0.6
265R250	9.3	12.8	4.6	7.6	5.1	4	0.6

**R** HuiZhou DaRong Electronic Technology CO.,LTD  
**265R HF Series PTC Devices**

265R300	9.3	14.5	4.6	7.6	5.1	4	0.6
265R330	9.3	14.5	4.6	7.6	5.1	4	0.6
265R400	10.5	16.5	4.6	7.6	5.1	3	0.8
265R500	11.8	17.5	4.6	7.6	5.1	3	0.8
265R550	11.8	17.5	4.6	7.6	5.1	3	0.8
265R600	11.8	17.5	4.6	7.6	5.1	3	0.8
265R650	14.0	18.3	4.6	7.6	5.1	3	0.8
265R750	14.5	21.7	4.6	7.6	5.1	3	0.8
265R800	14.5	21.7	4.6	7.6	5.1	3	0.8
265R900	16.5	24.5	4.6	7.6	10.2	3	0.8
265R1000C	21.1	25.1	4.6	7.6	10.2	2	0.8
265R1000S	19.0	25.5	4.6	7.6	10.2	3	0.8
265R1100	19.0	25.5	4.6	7.6	10.2	3	0.8
265R1250C	24.2	28.2	4.6	7.6	10.2	2	0.8
265R1250S	19.0	29.0	4.6	7.6	10.2	3	0.8
265R1350	19.0	29.0	4.6	7.6	10.2	3	0.8
265R1600	21.5	29.0	4.6	7.6	10.2	3	0.8
265R1850	25.0	29.0	4.6	7.6	10.2	3	0.8
265R2000	25.0	33.5	4.6	7.6	10.2	3	0.8

**PHYSICAL SPECIFICATIONS :**

Materials :

265R020-265R050: Tin-plated copper-clad steel, 22AWG,  $\Phi$ 0.50mm(0.026 in).

265R060-265R330: Tin-plated copper, 22AWG,  $\Phi$ 0.60mm(0.026 in).

265R400-265R2000: Tin-plated copper, 22AWG,  $\Phi$ 0.80mm(0.026 in).

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

**Packaging Quantity**

265	120	U	Model	Reel Q'ty	Bag Q'ty
Radial type	Hold	U= Bulk	265R020-265R2000	-	500
265V	Current(A)	packaged			

Tape & Reel packaging per EIA468-B standard.