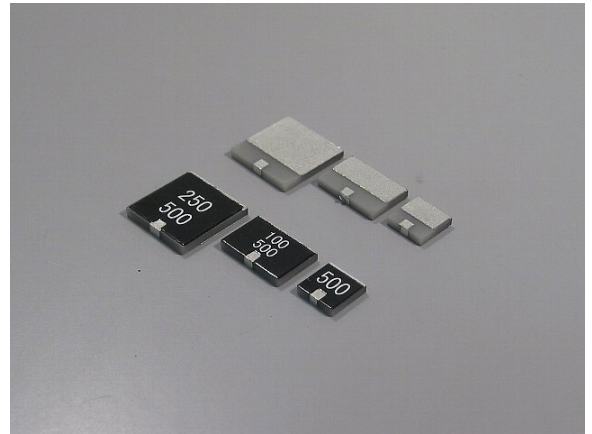


5W, 10W, 50W, 100W, 250W  
 HIGH POWER SMD TERMINATIONS  
 RFT005, RFT010, RFT050, RFT100,  
 RFT150, RFT250



### Features and Applications

- High power surface mount termination for all DC up to 5GHz applications.
- Small size and wide frequency range specifications realized with through large heat conducting AlN substrate.
- Sufficient mechanical strength metallization from spattered thin film technology.
- 50ohm resistance with tolerance 1% and 10W, 50W, 100W, 150W and 250W provided as standard, and other resistance and power available.
- Long life and temperature stability a result of Ni-Cr thin film technology.
- Termination for isolator/circulators, fixed station of mobile communication electronics, and high power microwave amplifiers.

### Ordering Information

Type	Structure	TCR	Resistance	Tolerance	Packaging	Note
RFT100	010	C	500	F	Z01	
RFT010	010	C	500	F	Z00	Bulk
RFT050	020	(50ppm/C)	(50 Ohms)	(1%)	Z01	Tape reel
RFT100						
RFT150						
RFT250						

### Specifications and Performances

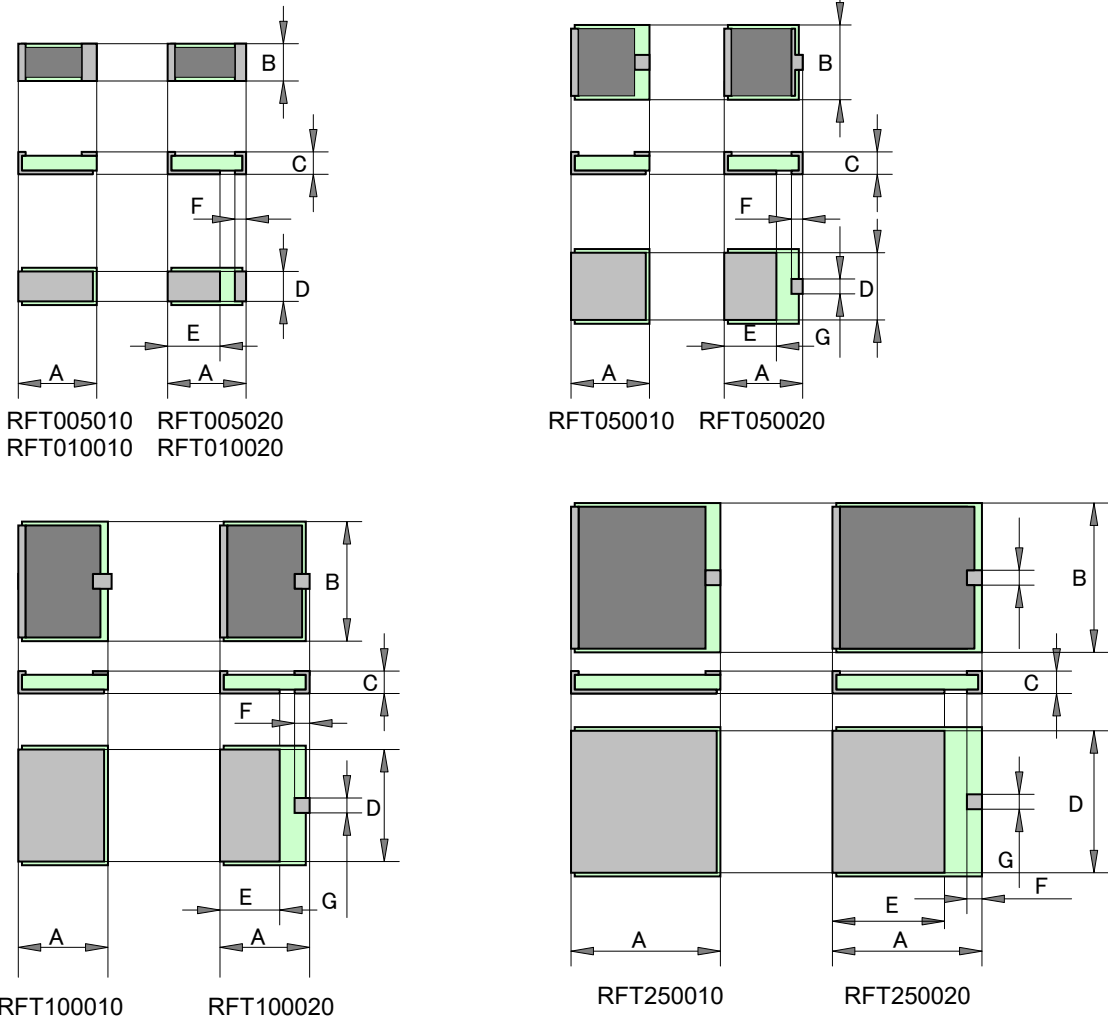
Type	RFT010	RFT050	RFT100	RFT150	RFT250	Conditions
Rated Power (W)	10	30	100	150	250	-55°C - +100 °C
Maximum Power (W)	20	50	200	300	500	Pulse < 1 second
Resistance (Std) Ohm	50 Ohms					
TC (ppm/°C)	50					
Tolerance (%)	1.0					
Heat Resistance (°C/W)	5.5	1.1	0.5	0.3	0.2	
VSWR at 1GHz *	1.15	1.15	1.18	1.20	1.25	
Max Operating Temperature	-55°C - 155 °C					
Storage Temperature	-55°C - 155 °C					

\* Varies depending on measuring tool.

5W, 10W, 50W, 100W, 250W

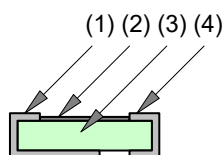
HIGH POWER TERMINATIONS RFT050, RFT010, RFT050, RFT100, RFT250

### Style and Dimension



Type	Power	A	B	C	D	E	F	G
RFT010 010	10W	5.08	2.54	1.05	2.34	-	1.27	1.27
RFT010 020		5.08	2.54	1.05	2.30	2.54	1.27	1.27
RFT050 010	50W	5.08	5.08	1.05	4.84	-	1.27	1.27
RFT050 020		5.08	5.08	1.05	4.84	2.54	1.27	1.27
RFT100 010	100W	5.84	8.89	1.05	8.49	-	1.27	1.27
RFT100 020		5.84	8.89	1.05	8.49	3.05	1.27	1.27
RFT150 010	150W	6.35	9.52	1.05	9.12	-	1.27	1.27
RFT150 020		6.35	9.52	1.05	9.12	4.05	1.27	1.27
RFT250 010	250W	9.52	9.52	1.05	9.12	-	1.27	1.27
RFT250 020		9.52	9.52	1.05	9.12	6.98	1.27	1.27

### Materials



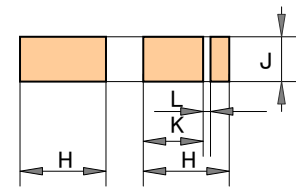
	Substance	Material
(1)	Cold end Terminal	Tin plated Ni + Cu
(2)	Resistive	Ni-Cr
(3)	Substrate	ALN
(4)	Hot end Terminal	Tin plated Ni + Cu

Note: When soldering this resistor, use SAC solder containing 3% silver. If you use low silver solder, copper diffusion may occur and the terminals happen to break

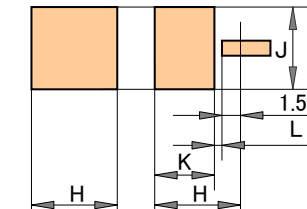
5W, 10W, 50W, 100W, 250W

HIGH POWER TERMINATIONS RFT050, RFT100, RFT250

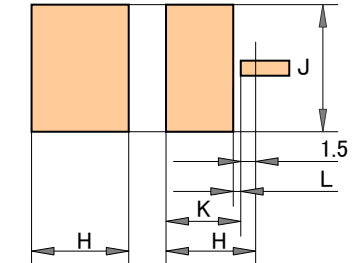
## Foot Pattern Design



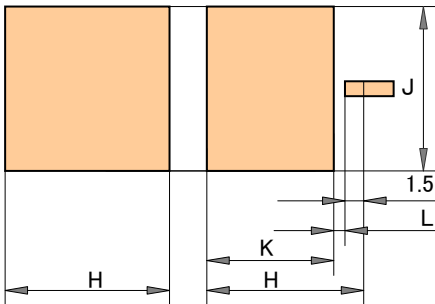
RFT010010 RFT010020



RFT050010 RFT050020

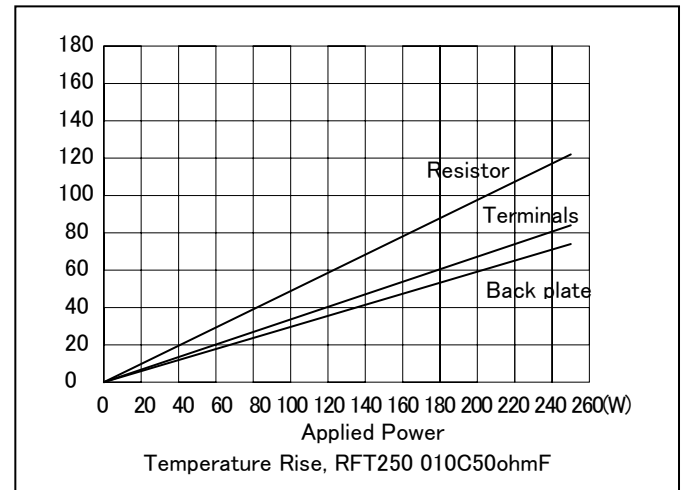
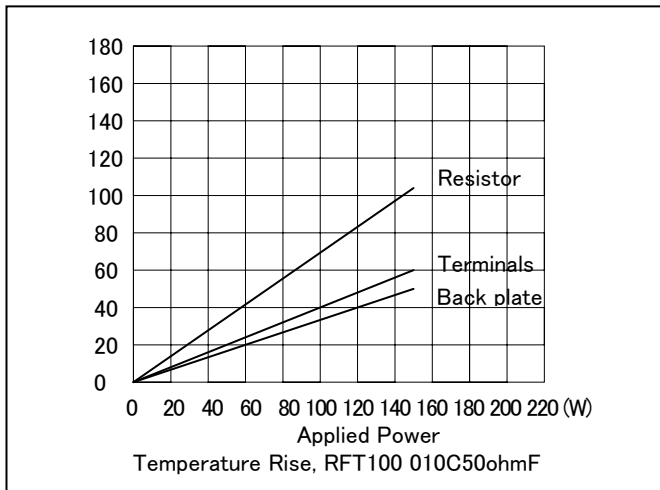


RFT100010 RFT100020



RFT250010 RFT250020

	H	J	K	L
RFT010 010	5.48	2.94	-	-
RFT010 020	5.48	2.94	(2.98)	0.5
RFT050 010	5.48	5.48	-	-
RFT050 020	5.48	5.48	(2.98)	0.5
RFT100 010	6.24	9.29	-	-
RFT100 020	6.24	9.29	(3.24)	0.5
RFT150 010	6.75	9.92	--	---
RFT150 020	6.75	9.92	(4.48)	0.5
RFT250 010	9.92	9.92	--	-
RFT250 020	9.92	9.92	(6.92)	0.5



**Note:**

- (1) Other resistance value and substrate thickness are available. Please consult Nikkohm factory.
- (2) Power rating assumes that chip attached on metal plate.
- (3) Solder joint design should assure a solder thickness within 50 micron meters.

**Derating Curve**

% rating power

