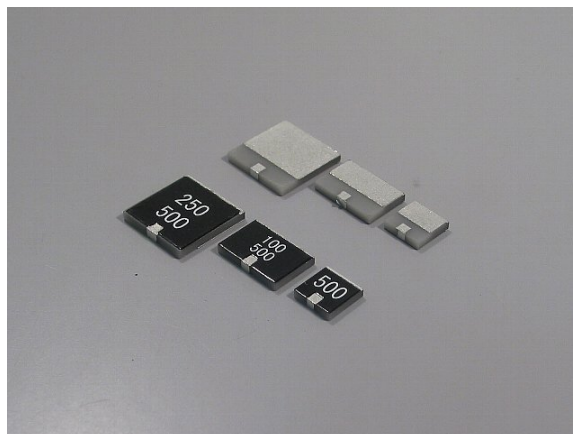


5W, 10W, 50W, 100W, 250W  
 HIGH POWER SMD TERMINATIONS  
 RFT005, RFT010, RFT050, RFT100,  
 RFT150, RFT250



### 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						

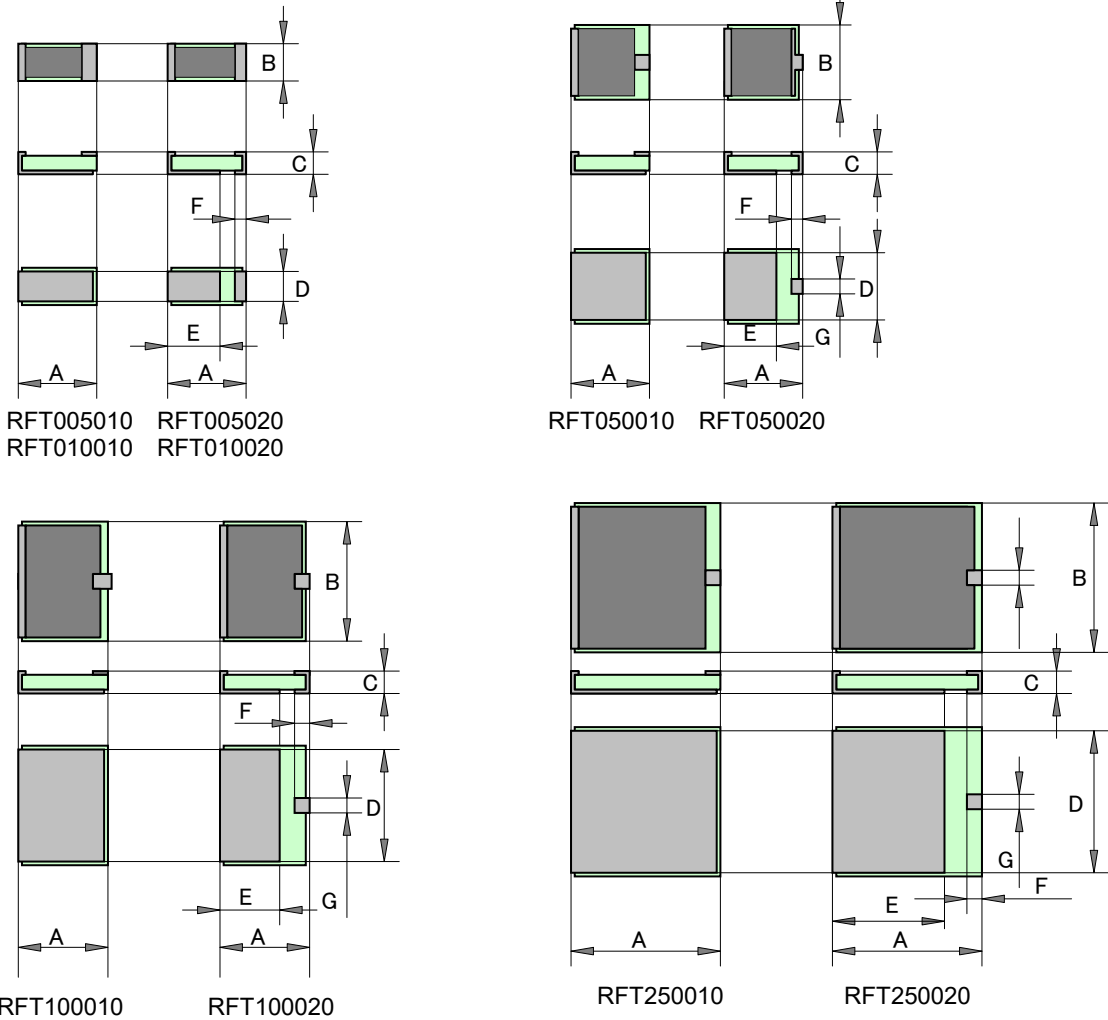
### Specifications and Performances

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.

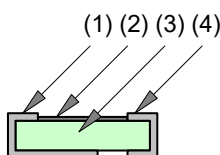
5W, 10W, 50W, 100W, 250W  
HIGH POWER TERMINATIONS RFT050, RFT010, RFT050, RFT100, RFT250

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

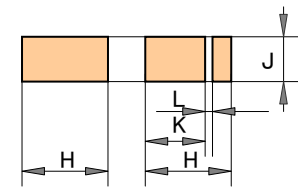


	Substance	Material
(1)	Cold end Terminal	Tin plated Ni + Cu
(2)	Resistive	Ni-Cr
(3)	Substrate	ALN
(4)	Hot end Terminal	Tin plated Ni + Cu

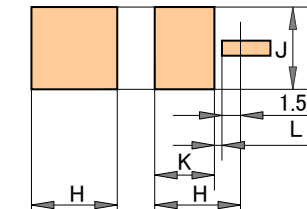
Note: When soldering this resistor, use SAC solder containing 3% silver. If you use low silver solder, copper diffusion may occur and the terminals happen to break

5W, 10W, 50W, 100W, 250W  
HIGH POWER TERMINATIONS RFT050, RFT100, RFT250

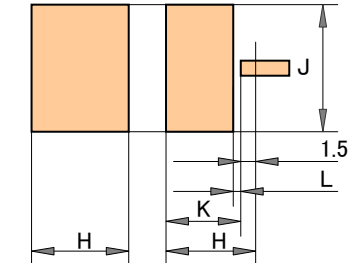
Foot Pattern Design



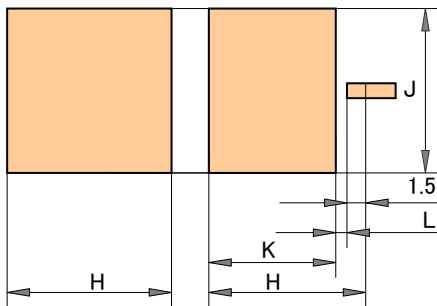
RFT010010 RFT010020



RFT050010 RFT050020

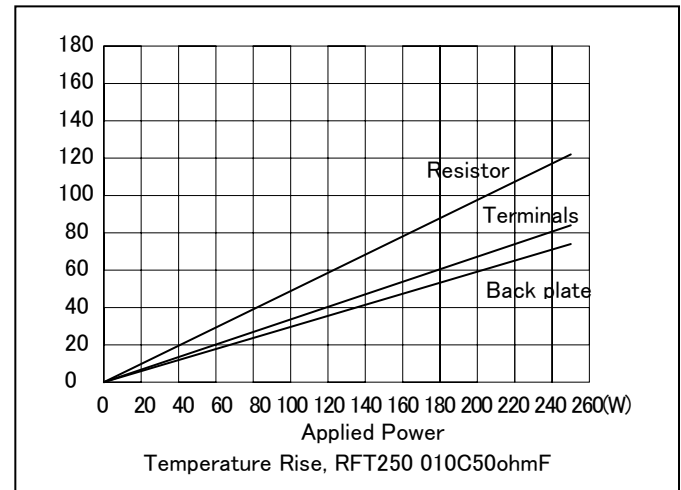
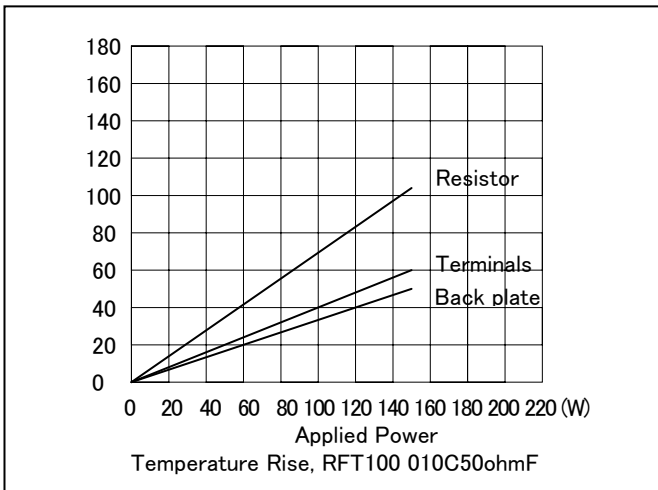


RFT100010 RFT100020



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

