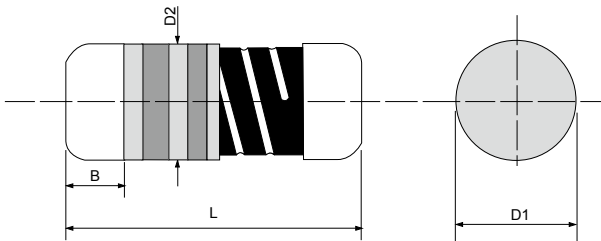


ALTERNATION HISTORY RECORDS 变更记录

Date 日期	Version 版本	Mark 标记	Page 页码	Description 描述	Drafter 制定者	Approver 审批者
2019-5-20	A	/	7	首次发行	常斯琴	彭旭

RHFT Series

High Frequency Terminator Resistor



1. Specifications Per

- IEC 60115-1
- EN 140401-803

2. Features

- SMD enabled structure
- Superior frequency response
- Excellent solderability termination
- Products meet RoHS requirements and do not contain substances of very high concern identified by European Chemicals Agency

■ DIMENSIONS

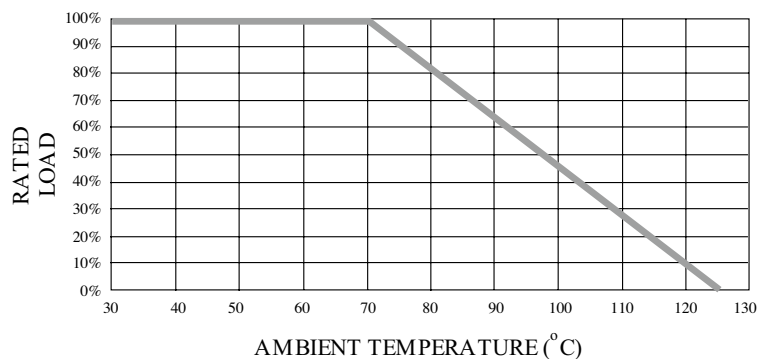
Type	Body Length (L, mm)	Cap Diameter (D1, mm)	Body Diameter (D2, mm)	Soldering Spot (B, mm)	Net Weight Per 1000 pcs
RHFT204	3.52 ± 0.15	1.35 ± 0.1	D1+0.02/ -0.15	0.6 Min.	17 grams
RHFT207	5.90 ± 0.20	2.20 ± 0.1	D1+0.02/ -0.2	1.0 Min.	66 grams
RHFT101	5.90 ± 0.20	2.20 ± 0.1	D1+0.02/ -0.2	1.0 Min.	66 grams
RHFT201	8.50 ± 0.50	3.00 ± 0.2	D1+0.05/ -0.35	1.3 Min.	186 grams

■ GENERAL SPECIFICATIONS

Type	Power Rating (at 70°C)	Maximum Working Voltage	Maximum Overload Voltage	Minimum Resistance	Maximum Resistance	Resistance Tolerance	Available Resistance Values
RHFT204	1/4W	200V	400V	24.9Ω	75Ω	±0.1%~±1%	E-24/E-96
RHFT207	1/3W	300V	500V	24.9Ω	75Ω	±0.1%~±1%	E-24/E-96
RHFT101	1W	300V	500V	24.9Ω	75Ω	±0.1%~±1%	E-24/E-96
RHFT201	2W	350V	700V	24.9Ω	75Ω	±0.1%~±1%	E-24/E-96

Special size, values, and specifications not listed available on special order.

■ POWER DERATING CURVE



RHFT Series

High Frequency Terminator Resistor

TECHNICAL SUMMARY

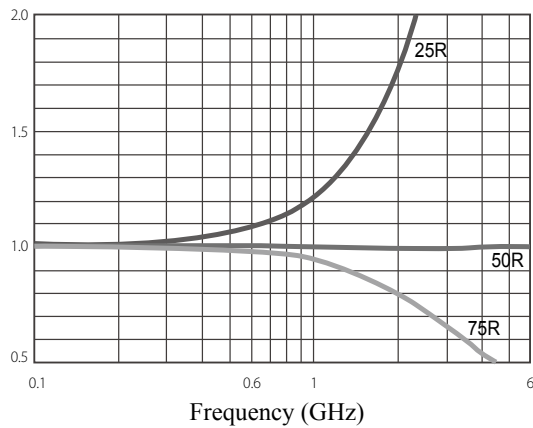
Characteristics	Limits
Dielectric Withstanding Voltage, VAC or DC	RHFT204: 200VAC RHFT207, RHFT101: 500VAC RHFT201: 700VAC
Temperature Coefficient, PPM / °C*	±50, ±100
Operating Temperature Range, °C	-55 ~ +125
Film Temperature, °C	125
Insulation Resistance, MΩ	>10 ⁴
Tin Whisker (JESD201 Temperature Cycling & High Temp. /Humidity Storage), μm	<5

* Not applicable to all resistance values. Please check with us regarding the PPM of specific resistance value(s).

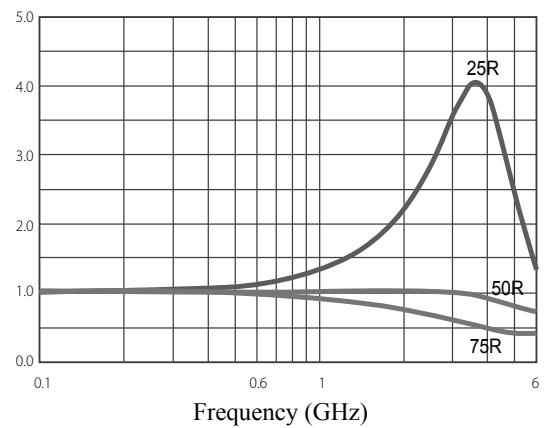
FUNCTIONAL PERFORMANCE

RF-BEHAVIOR

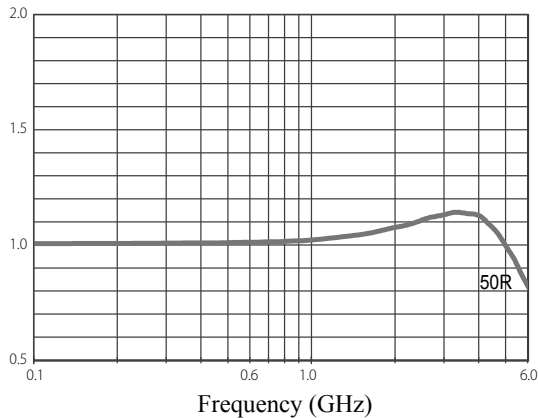
IZI/R for RHFT204 MELF resistors



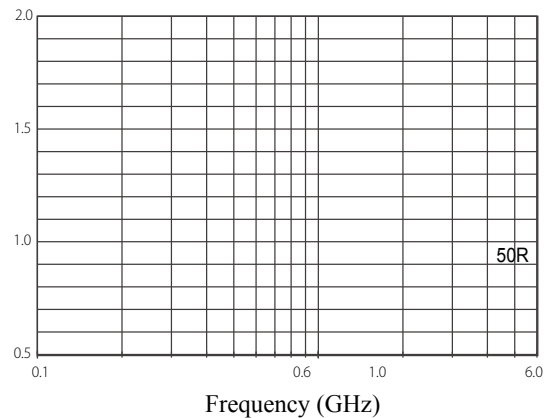
IZI/R for RHFT207 MELF resistors



IZI/R for RHFT101 MELF resistors



IZI/R for RHFT201 MELF resistors



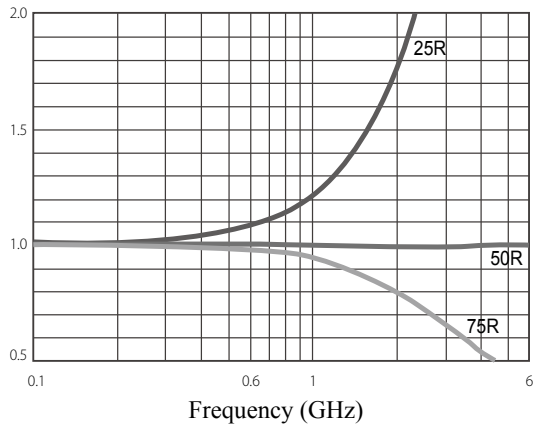
RHFT Series

High Frequency Terminator Resistor

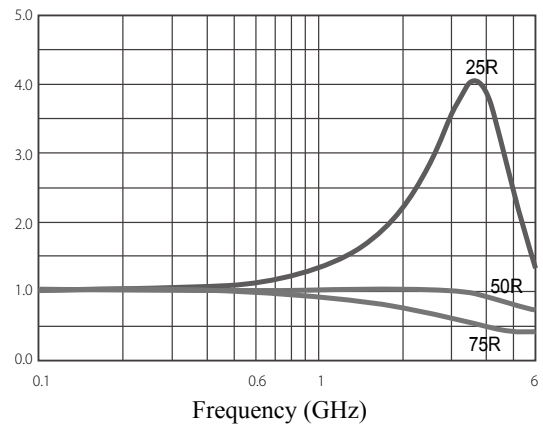
FUNCTIONAL PERFORMANCE

RF-BEHAVIOR

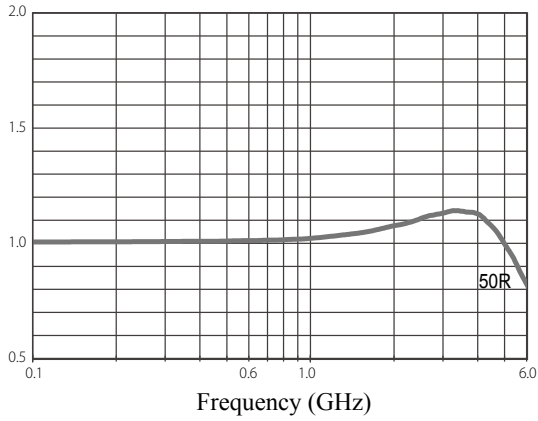
IZI/R for RHFT204 MELF resistors



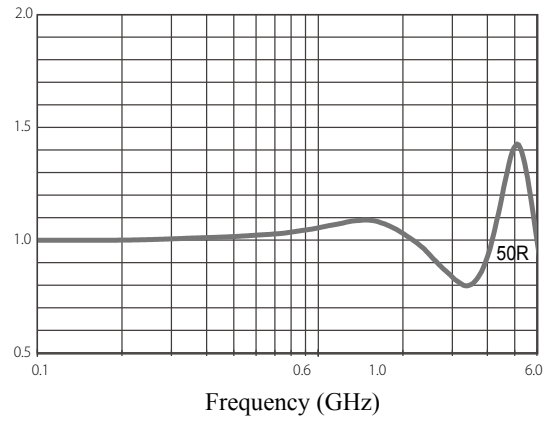
IZI/R for RHFT207 MELF resistors



IZI/R for RHFT101 MELF resistors



IZI/R for RHFT201 MELF resistors



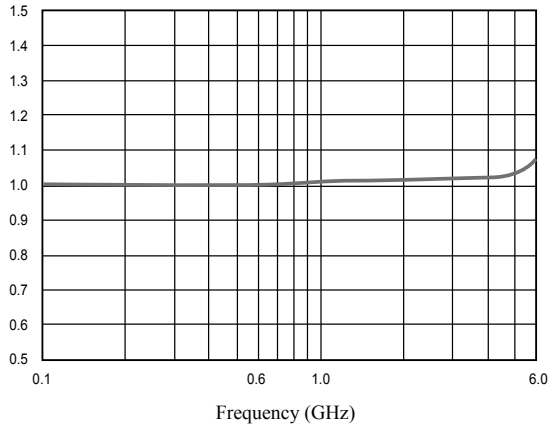
RHFT Series

High Frequency Terminator Resistor

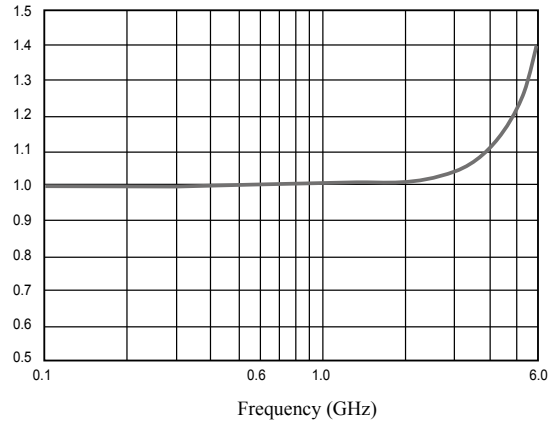
FUNCTIONAL PERFORMANCE

VSWR

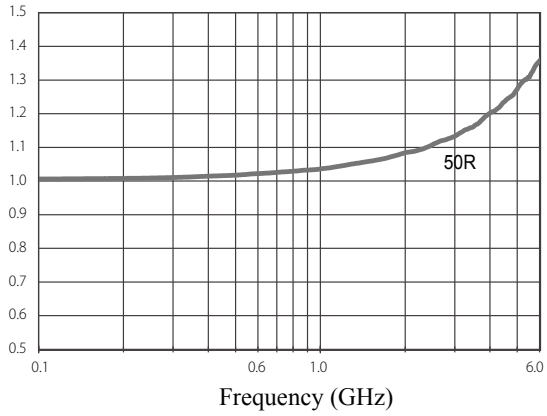
RHFT204 50R MFLF Resistor



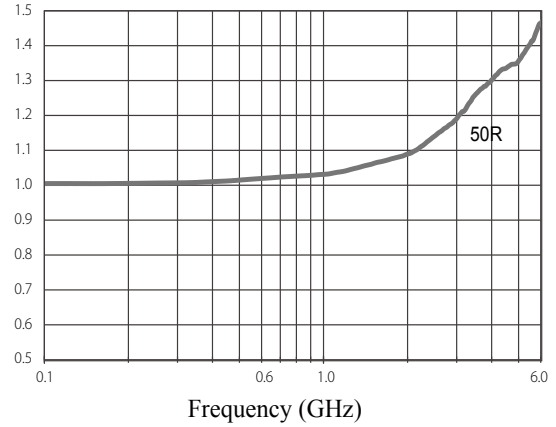
RHFT207 50R MFLF Resistor



RHFT101 50R MELF Resistor



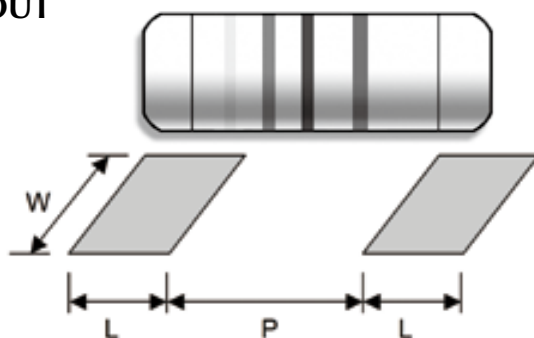
RHFT201 50R MELF Resistor



RHFT Series

High Frequency Terminator Resistor

■ SUGGESTED PAD LAYOUT



Type	Soldering Mode	Pad Length (L, mm, Min.)	Pad Spacing (P, mm)	Pad Width (W, mm, Min.)
RHFT204	Reflow	1.3	1.6 ± 0.1	1.6
	Wave	1.5	1.5 ± 0.1	1.8
RHFT207	Reflow	2.0	3.0 ± 0.1	3.0
	Wave	2.5	3.0 ± 0.1	3.0
RHFT101	Reflow	2.0	3.0 ± 0.1	3.0
	Wave	2.5	3.0 ± 0.1	3.0
RHFT201	Reflow	3.0	4.9 ± 0.3	3.7
	Wave	3.5	4.8 ± 0.3	4.0

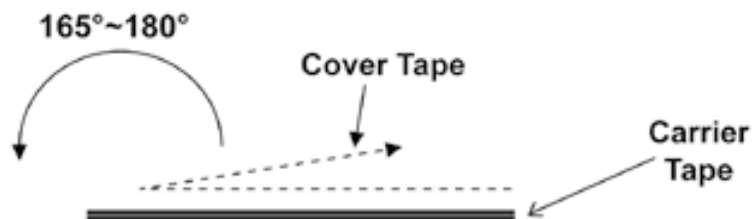
■ COVER TAPE PEELING SPECIFICATION

For better heat dissipation / lower heat resistance, increase W & L.

Recommended peeling force:

RHFT204, RHFT207, RHFT101: 50±5gf

RHFT201: 70±10gf



■ PART NUMBER

Example: RHFT2041/4W22RK50ppmNIL

RHFT204	1/4W	22R	K	50ppm	NIL
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Type	Power	Resistance	Tolerance	TCR	Packaging
	1/4W	22R=22Ω 22K=22KΩ 1M=1MΩ R = 1 K = 10 ³ M = 10 ⁶ G = 10 ⁹	J (5%) K (10%) M (20%)	3-7-character code TYL=Typical ± 5 ppm=5ppm ± 1000ppm=1000ppm	Nil = Bulk T/R = Tape and Reel T/B = Tape and Box

RHFT Series

High Frequency Terminator Resistor

■ PERFORMANCE SPECIFICATIONS

Characteristics	Test Conditions	Limits
Short Time Overload	IEC 60115-1 4.13 5 seconds 2.5x rated voltage (not over max. overload voltage)	±0.5%
Load Life In Humidity	IEC 60115-1 4.24 56 days rated load (not over max. working voltage) at (40±2)°C and (93±3)% relative humidity	±2%
Load Life	IEC 60115-1 4.25.1 Rated load (not over max. working voltage) 1,000 hours with 1.5 hours ON, 0.5 hours OFF, at (70±2)°C	±2%
Periodic Electric Overload	IEC 60115-1 4.39 3.9x rated voltage (not over max. overload voltage) with 0.1s ON, 2.5s OFF for 1,000 cycles	±2%
Resistance To Soldering Heat	IEC 60115-1 4.18.2 Dip the resistor into a solder bath measured (260±5)°C and hold it for a 10±1 seconds	±0.5%
Solderability	IEC 60115-1 4.17.2 Solder area covered after (235±3)°C/(2±0.2) seconds with flux applied	95% min. coverage
Vibration	IEC 60115-1 4.22 Six hours in each parallel and axial direction with a simple harmonic motion having an amplitude of 1.52mm and 10 to 2,000 Hz.	±1%
Thermal Endurance	IEC 60115-1 4.25.3 1000 hours at 125°C without load	±2%
Thermal Shock	IEC 60115-1 4.19 -55°C 30minutes, +125°C 30minutes, 5 cycles	±0.5%
Single pulse high voltage overload	IEC 60115-1 4.27 10 pulses of 10/700µs at 10x rated voltage (not over max. overload voltage) with interval of 60 sec.	±1%
Electrostatic discharge (Human body model)	IEC 60115-1 4.38 3 positive & 3 negative discharges with 2KV for RHFT204 or 4KV for RHFT207	±2%
Climatic test	IEC 60115-1 4.23 4.23.2 - dry heat: 16 hours 125°C 4.23.3 - damp heat: 24 hours 55°C with 95% relative humidity 4.23.4 - cold: 2 hours -55°C 4.23.5 - negative air pressure: 2 hour 8.5KPa at (25±10)°C 4.23.6 - damp heat cyclic: 5 days 55°C with 95% relative humidity 4.23.7 - DC load: rated voltage at -55°C and 125°C each 1 Min.	±1%
Bending test	IEC 60115-1 4.33 Pressing depth 2mm, 3 times	±0.25%
Flammability	IEC 60115-1 4.35 Needle flame test 10s	No burning after 30s