

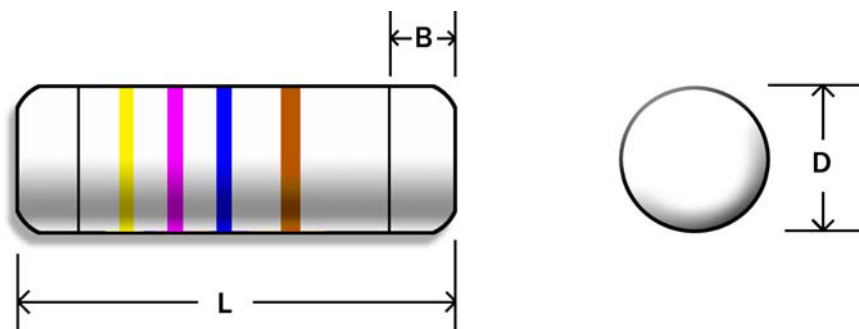
# HFT- High Frequency Terminator Resistor

## Specifications Per

- IEC 115-1 115-2
- CECC 40101
- DIN 44061

## Features

- SMD enabled structure
- Superior Frequency Response
- Excellent Solderability Termination
- 5% is 3-band coded, 1% and under is 4-band coded



## Dimensions

| Type   | Body Length (L) | Body Diameter (D) | Soldering spot (B) | Net Weight Per 1000 pcs |
|--------|-----------------|-------------------|--------------------|-------------------------|
| HFT204 | 3.45mm±0.1mm    | 1.35±0.1mm        | 0.6mm Min.         | 17 grams                |
| HFT207 | 5.9mm±0.2mm     | 2.2±0.1mm         | 1.0mm Min.         | 66 grams                |

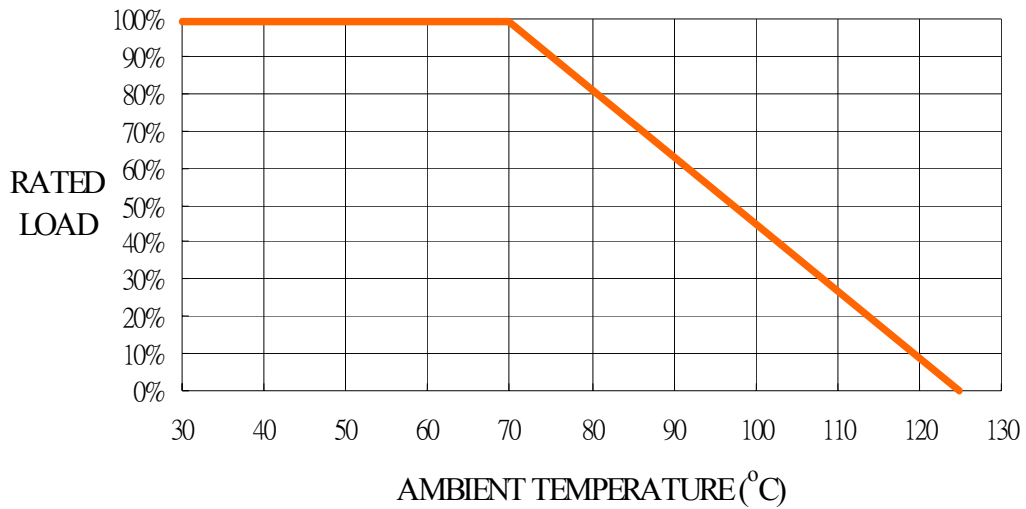
## General Specifications

| Type   | Power Rating (at 70°C) | Max. Working Voltage | Max. Overload Voltage | Resistance Range Min. | Resistance Range Max. | Resistance Tolerance | Standard Resistance Value |
|--------|------------------------|----------------------|-----------------------|-----------------------|-----------------------|----------------------|---------------------------|
| HFT204 | 1/4W                   | 200V                 | 400V                  | 25Ω                   | 75Ω                   | ±0.1%~±1%            | E-24/E-96                 |
| HFT207 | 1/3W                   | 300V                 | 500V                  | 25Ω                   | 75Ω                   | ±0.1%~±1%            | E-24/E-96                 |

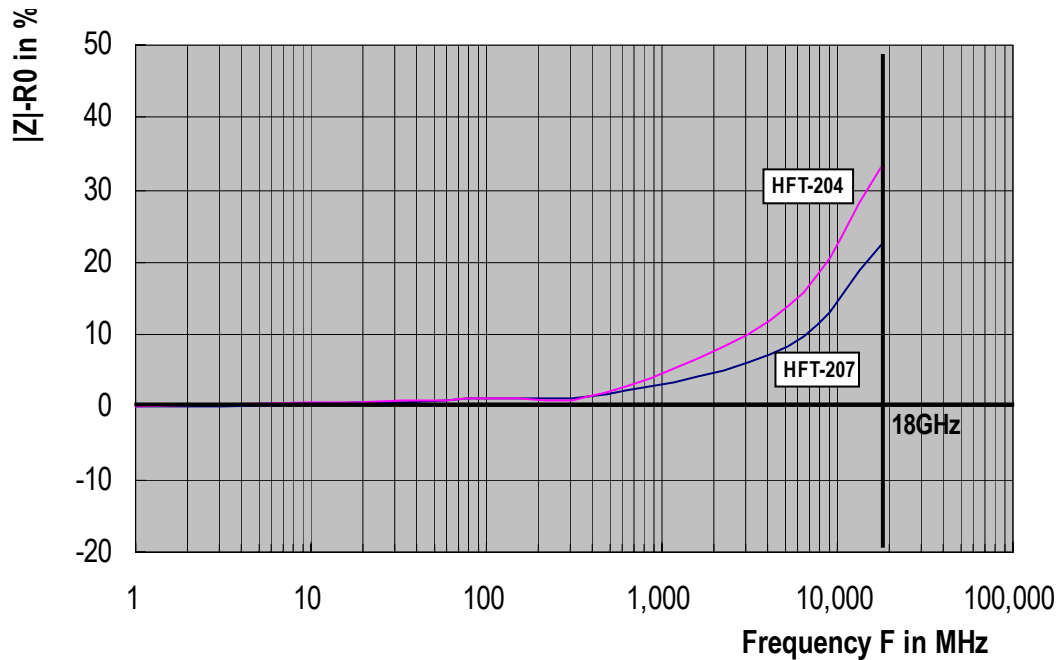
*Special size, values, and specifications not listed available on special order.*

# HFT- High Frequency Terminator Resistor

POWER DERATING CURVE



High Frequency Performance



May. 26, 2000

# HFT- High Frequency Terminator Resistor

## Technical Summary:

| Characteristics                            | Limits                           |        |
|--|----------------------------------|--------|
| Dielectric Withstanding Voltage, VAC or DC | HFT204: 200VAC<br>HFT207: 500VAC |        |
| Temperature Coefficient, PPM / °C          | ±1%, 2%                          | ±50    |
|  | ±5%                              | ±100   |
| Operating Temperature Range, °C            | -55 ~ +125                       |        |
| Film Temperature, °C                       | HFT204                           | HFT207 |
|  | 125                              | 125    |
| Insulation Resistance, MΩ                  | >10 <sup>4</sup>                 |        |

## Performance Specifications

| Tests Characteristics        | Test Conditions   | Limits        |
|------------------------------|---|---------------|
| Short Time Overload          | IEC 60115-1 4.13<br>5 seconds 2.5x rated voltage (not over max. overload voltage)   | ±(0.5%+0.05R) |
| Load Life In Humidity        | IEC 60115-1 4.24<br>56 days at 40°C and 93% relative humidity   | ±(1.0%+0.05R) |
| Load Life 1,000 hours        | IEC 60115-1 4.25.1<br>Rated load 1.5 hours ON, 0.5 hours OFF, at 70°C   | ±(1.0%+0.05R) |
| Resistance To Soldering Heat | IEC 60115-1 4.18<br>10 seconds at 260°C solder bath temperature   | ±(0.5%+0.05R) |
| Solderability                | MIL-STD-202 Method 208<br>Solder area covered after 230±5°C/5±0.5 seconds w/ flux applied   | 95% Min.      |
| Vibration                    | MIL-STD-202 Method 204<br>Six hours in each parallel and axial direction w/ a simple harmonic motion having an amplitude of 1.52mm and 10 to 20,000 Hz. | ±(1%+0.1R)    |
| Terminal Endurance           | IEC 60115-1 4.25.3<br>1000 hours at 125°C without load  | ±(0.5%+0.05R) |
| Thermal Shock                | IEC 60115-1 4.19<br>-55°C 30minutes, +125°C 30minutes, 5 cycles   | ±(0.5%+0.05R) |

## Ordering Information

| Type             | Tolerance | Temperature Coefficient | Resistance Value | Packaging | Special Request (Optional) |
|------------------|-----------|-------------------------|------------------|-----------|----------------------------|
| HFT204<br>HFT207 | J (5%)    | TK100                   | 10K              | B<br>TR   | LV<br>(Low value)          |

May. 26, 2000