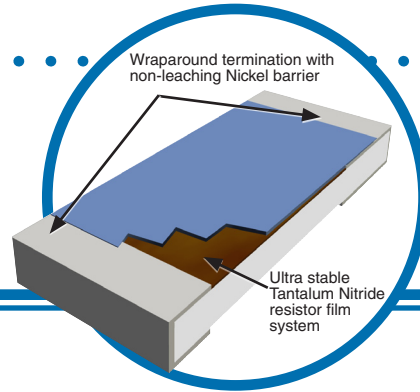


Mil-Screened High Frequency Chip Resistors

PFC HF MIL Series

- Long life TaNFilm® element
- Military screening per MIL-PRF-55342
- Available in 0603, 0805 and 1206 chip sizes
- Standard 60/40 Sn/Pb solder plated terminations



IRC offers MIL-screened high frequency chip terminators are available in standard chip resistor sizes. Available in 0603, 0805 and 1206 chip sizes, the PFC-HF MIL is a drop-in replacement for poorer performing standard size chips. Built on the same production line as our mil-qualified, tantalum nitride PFC chip resistors with Group A screening to MIL-PRF-55342 assures the highest level of performance and reliability.

With operation characterized to 6GHz, the PFC-HF MIL series is suitable for RF and microwave transmission line termination as well as high speed digital line termination. Applications include SCSI bus terminations, DDR memory terminations, RF and microwave transmit and receive line terminations.

Electrical Data

	Maximum Continuous Power Rating	Ohmic Value	Available Tolerances	Temperature Range	Noise	Termination	Substrate
W0603HF	100mW	50.0Ω and 75.0Ω	K J G F	-55°C to 150°C	<-25dB	60/40 Sn/Pb Plate	99.5% Alumina
W0805HF	150mW						
W1206HF	250mW						

Environmental Data

Environmental Test MIL-PRF-55342	Maximum ΔR Per Characteristic E	Performance	
		Typical	Maximum
Thermal Shock	±0.10%	±0.02%	±0.10%
Low Temperature Operation	±0.10%	±0.01%	±0.05%
Short-time Overload	±0.10%	±0.01%	±0.05%
High Temperature Exposure	±0.10%	±0.03%	±0.10%
Effects Of Solder	±0.20%	±0.01%	±0.10%
Moisture Resistance	±0.20%	±0.03%	±0.10%
Life	±0.50%	±0.03%	±0.10%

General Note

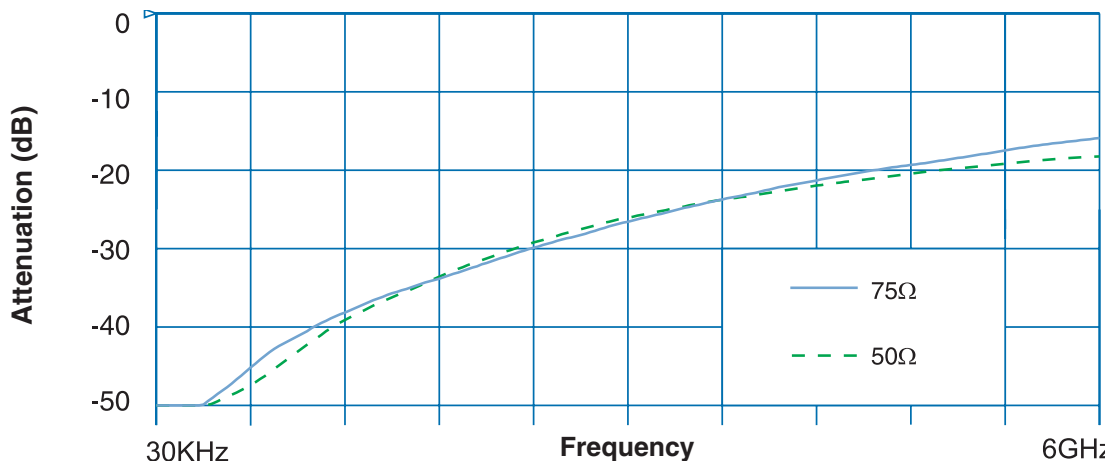
IRC reserves the right to make changes in product specification without notice or liability. All information is subject to IRC's own data and is considered accurate at time of going to print.

Mil-Screened High Frequency Chip Resistors

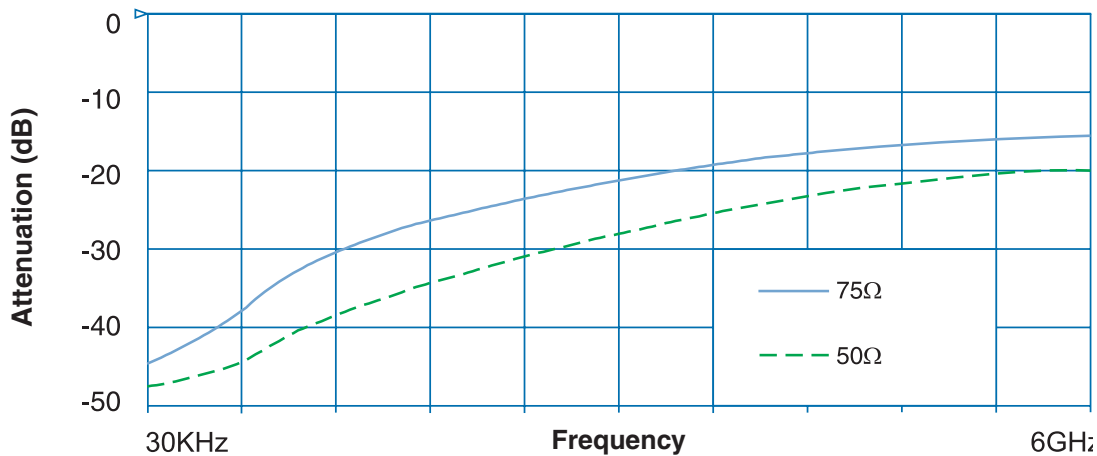


Return Loss Data (S11, S22)

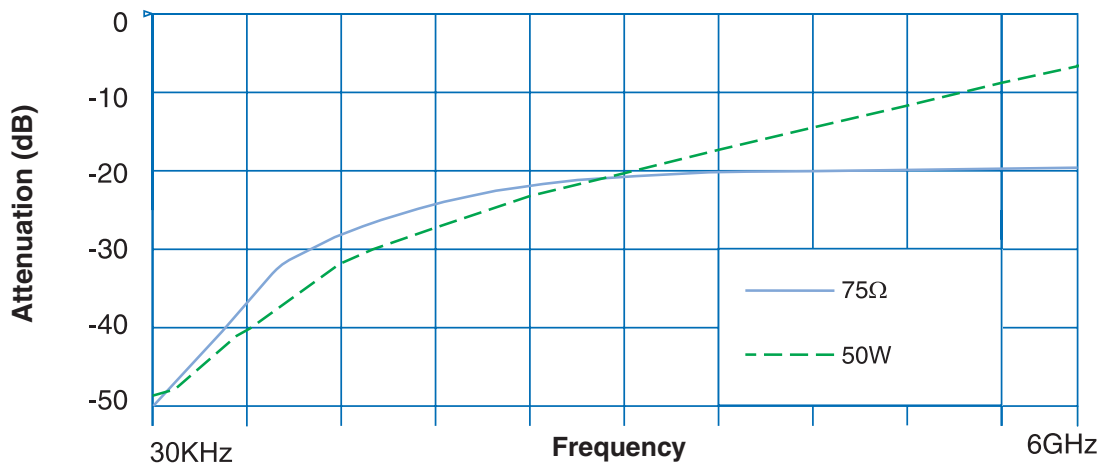
W0603HF Frequency Performance



W0805HF Frequency Performance

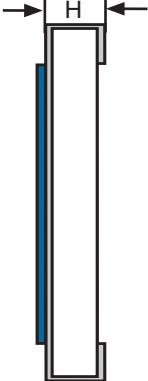
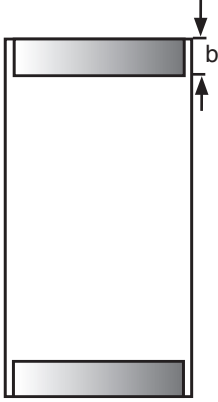


W1206HF Frequency Performance

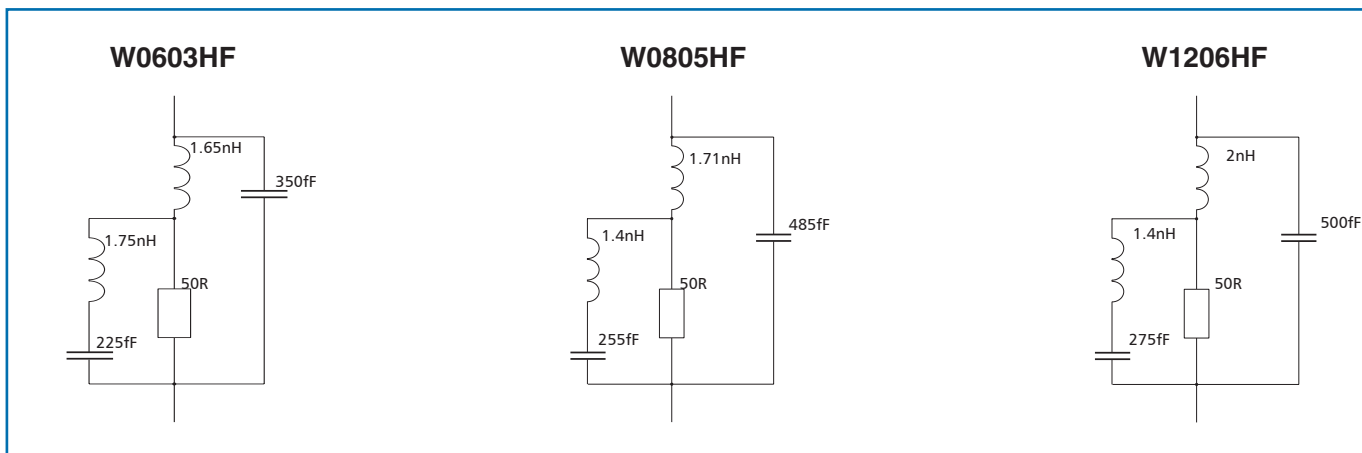


Mil-Screened High Frequency Chip Resistors

Physical Data

	Top	Side	Bottom		
					
	L	W	H	a	b
W0603	0.063"±0.004	0.031"±0.004	0.020"±0.004	0.012"±0.005	0.015"±0.005
W0805	0.081"±0.005	0.050"±0.005	0.020"±0.006	0.016"±0.008	0.016"±0.008
W1206	0.126"±0.006	0.063"±0.005	0.024"±0.004	0.025"±0.010	0.025"±0.010

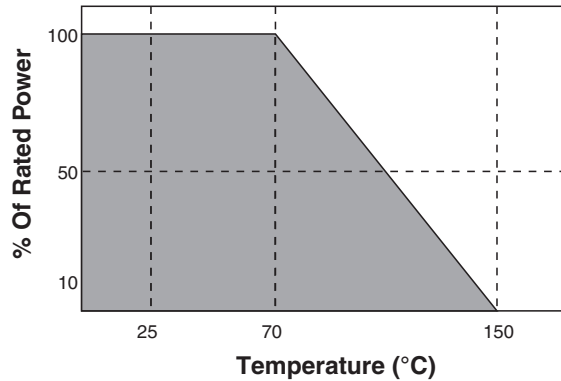
Modeling Data



Mil-Screened High Frequency Chip Resistors



Power Derating Curve



For additional information or to discuss your specific requirements, please contact our Applications Team using the contact details below.

Ordering Data

Prefix **PFC** - **W0603HF** - **05** - **50R0** - **F**

Model
W0603HF = High frequency 0603 chip
W0805HF = High frequency 0805 chip
W1206HF = High frequency 1206 chip

Characteristic Code
04 = MIL Screening IAW MIL-PRF-55342 Characteristic M
05 = MIL Screening IAW MIL-PRF-55342 Characteristic K
06 = MIL Screening IAW MIL-PRF-55342 Characteristic H
07 = MIL Screening IAW MIL-PRF-55342 Characteristic E

Resistance Code
50R0 = 50Ω; 75R0 = 75Ω

Tolerance Code
K = ±10%; J = ±5%; G = ±2%; F = ±1%