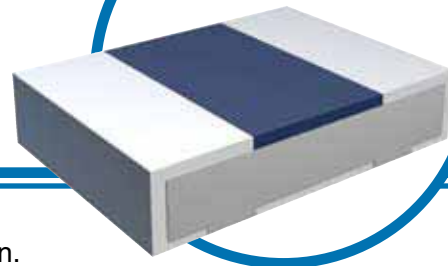


High Power, Surface Mount RF Terminators

RFTS Series

- High frequency operation up to 3 GHz
- Up to 250W dissipation on Aluminum Nitride substrate
- Thin film technology performance, stability long life



The RFTS is a leadless high power chip termination solution. Operation to 3 GHz is available through the use of a rugged thin film element providing performance stability over time and temperature. A selection of four termination configurations allow maximum versatility for different circuit designs and construction.

An aluminum nitride substrate provides the high thermal conductivity for power dissipation ratings from 5 watts to 250 watts. Applications include satellite communications, isolator/circulators, cell base stations and high power microwave/RF power amplifiers.

Electrical Data

	RFTS05	RFTS10	RFTS50	RFTS100	RFTS250
Resistance	50 , 75				
VSWR @ 1GHz	1.15	1.15	1.2	1.2	1.2
Power Rating @100°C	5W	30W	50W	100W	250W
Pulse Power < 1 second	10W	60W	100W	200W	500W
Thermal Resistance	12.5°C/W	6.5°C/W	2.5°C/W	1.3°C/W	0.5°C/W
Tolerance	1%				
Operating Temperature	-55°C to +155°C				
Absolute TCR	±50 ppm/°C				

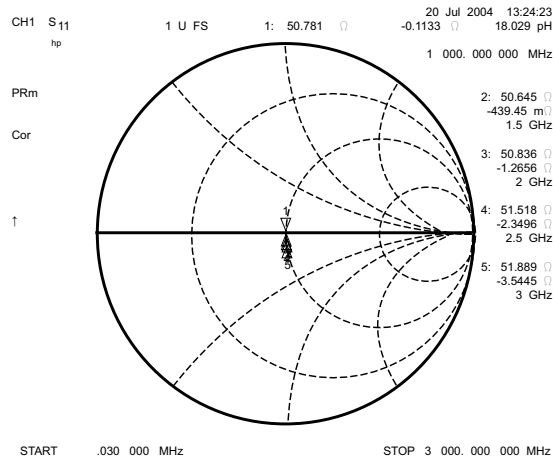
General Note

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.

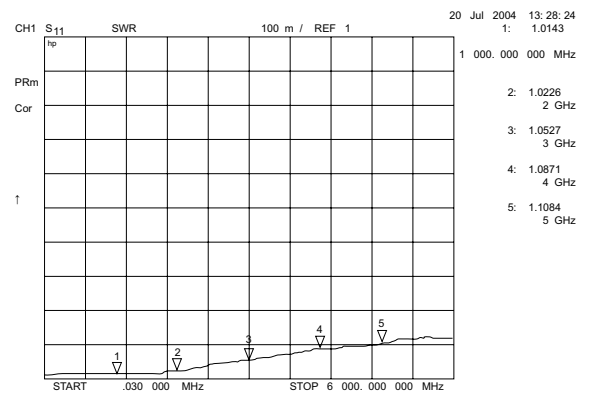
High Power, Surface Mount RF Terminators

S11 and VSWR Data

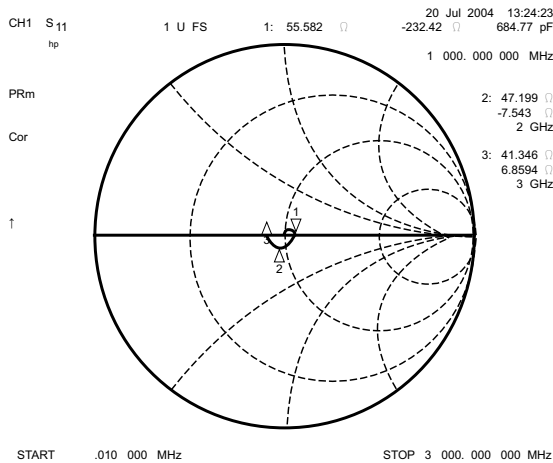
S11, RFTS05C 50 F0F0



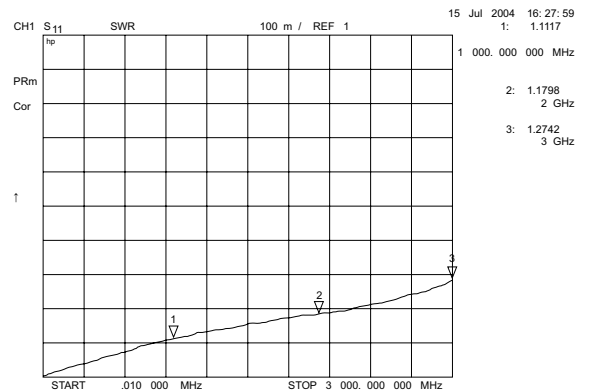
VSWR RFTS05C 50 F0F0



S11, RFTS100C 50 F0F0

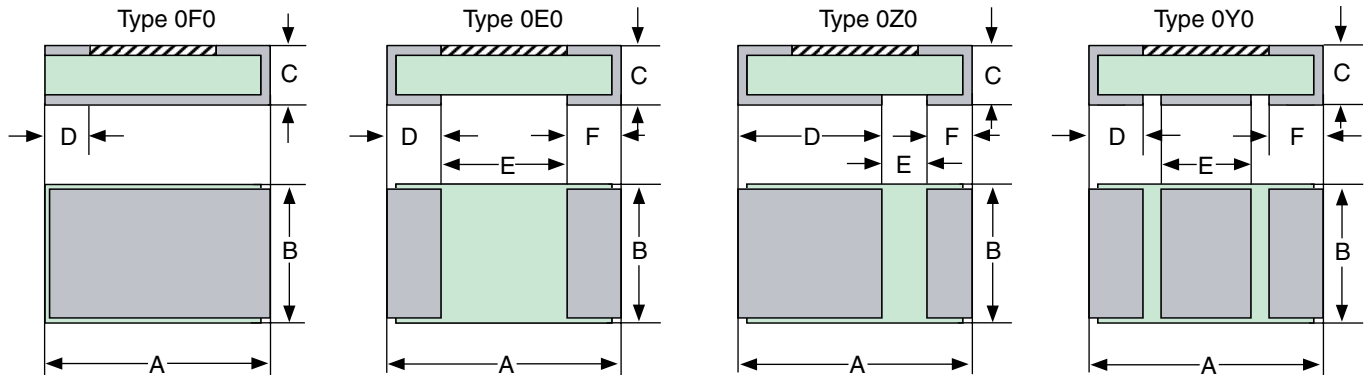


VSWR RFTS100C 50 F0F0



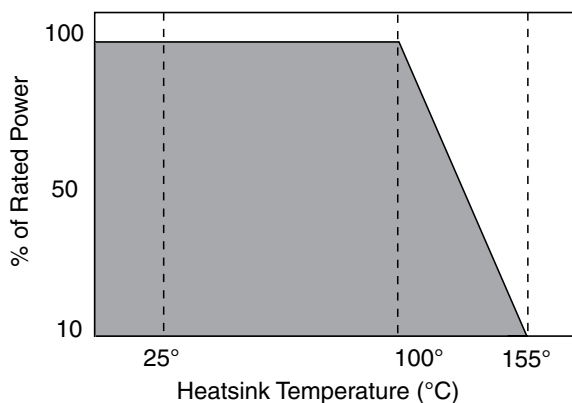
High Power, Surface Mount RF Terminators

Physical Data



Dimension (mm)							
Type	Type	A	B	C	D	E	F
RFTS05	0F0	2.54	1.27	1.00	0.60	—	—
RFTS05	0E0	2.54	1.27	1.00	0.60	1.00	0.60
RFTS10	0F0	5.08	2.54	1.00	1.00	—	—
RFTS10	0E0	5.08	2.54	1.00	1.00	3.00	1.00
RFTS50	0F0	5.08	5.08	1.20	1.00	—	—
RFTS50	0E0	5.08	5.08	1.20	1.00	3.00	1.00
RFTS50	0Z0	5.08	5.08	1.20	3.00	1.08	1.00
RFTS50	0Y0	5.08	5.08	1.20	1.00	2.00	1.00
RFTS100	0F0	5.84	8.89	1.20	1.20	—	—
RFTS100	0E0	5.84	8.89	1.20	1.20	2.40	1.20
RFTS100	0Z0	5.84	8.89	1.20	3.40	1.20	1.20
RFTS100	0Y0	5.84	8.89	1.20	1.20	2.40	1.20
RFTS250	0F0	9.52	9.52	1.20	1.20	—	—
RFTS250	0E0	9.52	9.52	1.20	1.20	7.10	1.20
RFTS250	0Z0	9.52	9.52	1.20	7.10	1.20	1.20
RFTS250	0Y0	9.52	9.52	1.20	1.20	6.00	1.20

Power Derating Curve



Ordering Data

Prefix **HFR** - **RFTS05** **C50 OHM** - **F** - **0F0**

Model
RFTS05; RFTS10; RFTS50; RFTS100; RFTS250

Resistance
C50 OHM; C75 OHM

Tolerance
F = ±1%

Outline Type (See Physical Data)