

# RF Disk Resistor

## Features and Applications

These are disk resistors designed for high frequency terminations. They are easy to integrate with coaxial connectors to printed circuit boards. This will result in a high performance termination. These have thin film elements mounted on a highly conductive substrate. These have a maximum operation temperature of 155°C. These have a low TCR of +/-25ppm/K and +/-1% tolerance. Original spoke-trimming ensures excellent stability and long life. Application include : Mobile communications system, measuring instruments, high frequency power supply equipment.



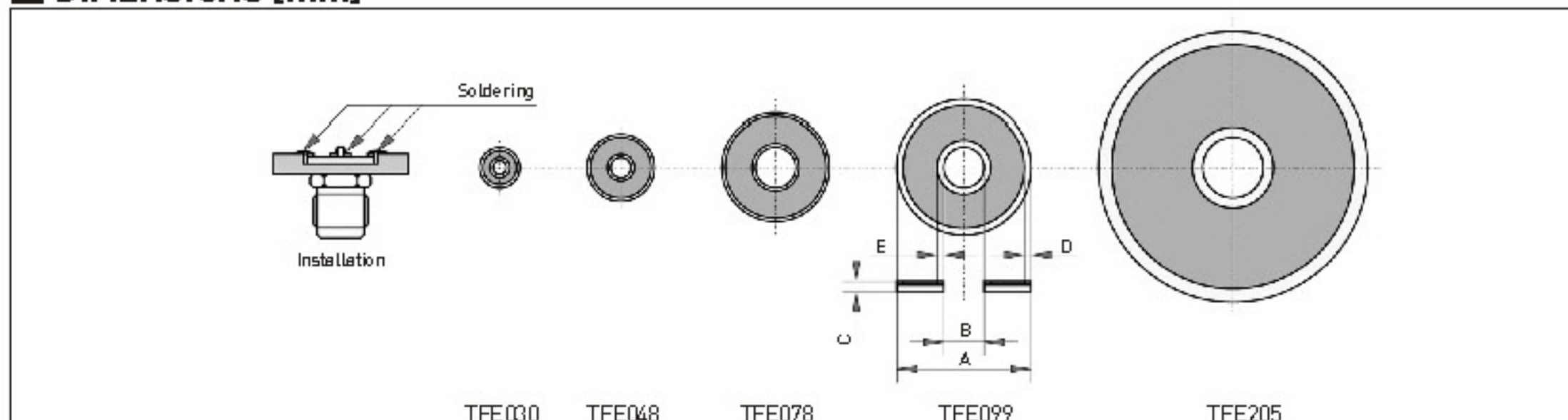
## GENERAL SPECIFICATIONS

Model	Rated Power[W]	Resistance[Ω]	Absolute T.C.R	Tolerance(%)
TFE030	0.5W	50	±100ppm/°C	F(±1) J(±5)
TFE048	1.0W			
TFE078	1.0W			
TFE099	2W			
TFE205	5W			

## CHARACTERISTICS

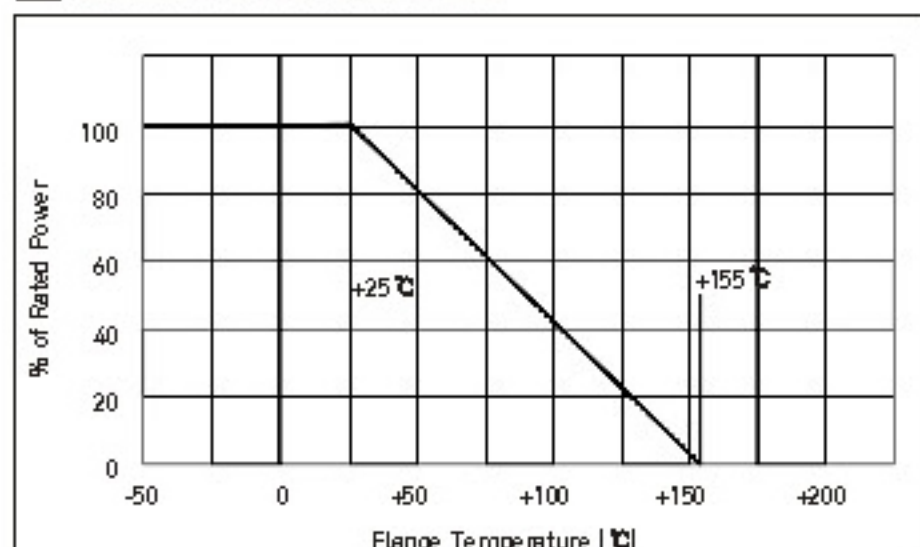
Temperature Cycle	±0.5%	-55°C 30min., +120°C 30min., 20cycles.
Max Working Voltage		$E = \sqrt{P \cdot R}$
Short Time Over Load	±0.5%	Rating Power *2.5, 5seconds
Solderability	Covered 95%	235°C, 2seconds
Solvent	No damage	IPA test
Terminal Strength	±0.5%	
Withstanding Voltage	±0.3%	
Soldering Heat	±0.3%	350°C, 3seconds
Load Life	±0.5%	1000hours
Humidity	±0.5%	1000hours
Shelf Life Stability	±0.3%	One year at 25°C
Operating Temp		-55°C to +155°C
Storage Temp. Range		-55°C to +155°C

## DIMENSIONS [mm]



Model	A max(mm)	B min(mm)	C	D	E
TFE030	3.0+0.0/-0.2	1.4 +0.2/-0.0	0.8 ± 0.1	0.2 ± 0.05	0.2 ± 0.05
TFE048	4.8 +0.0/-0.2	1.4 +0.2/-0.0	0.8 ± 0.1	0.2 ± 0.05	0.2 ± 0.05
TFE078	7.8 +0.0/-0.2	2.9+0.2/-0.0	0.8 ± 0.1	0.2 ± 0.05	0.2 ± 0.05
TFE099	9.9+0.0/-0.2	2.9+0.2/-0.0	0.8 ± 0.1	0.2 ± 0.05	0.2 ± 0.05
TFE205	20.5+0.0/-0.2	6.0+0.2/-0.0	0.8 ± 0.1	0.2 ± 0.05	0.2 ± 0.05

## DERATING CURVES



## ORDERING PROCEDURE EXAMPLE

Ordering Example	Model	TCR	Resistance	Tolerance(%)	Code
TFE030E50RFZ00	TFE030	A(±100ppm/°C)	50Ω	F(±1)	Z00
TFE048E50RFZ00	TFE048		50Ω	F(±1)	Z00
TFE078E50RFZ00	TFE078		50Ω	F(±1)	Z00