

# Technical Characteristics

Chip Equalizer Capabilities	CEXXXXXXXXSMTF (Standard Equalizer)	CEHFXXXXXXXXSMTF (High Frequency)
-----------------------------	-------------------------------------	-----------------------------------

## Electrical

Nominal Impedance	50 ohms	50 Ohms $\pm$ 10%
Operating Frequency <small>*See Table For Currently Available Values</small>	Up to 10 GHz	Up To 40 GHz (in customizable bandwidth 20%)
Slope	1-4 dB	1-4 dB
Slope Linearity	$\pm$ 0.25 dB	$\pm$ 0.25 dB Minimum
Insertion Loss	1.25 dB Max	0.5 dB Typical, 1.0 dB Max
VSWR	1 dB Slope: 1.3:1 Max 2 dB Slope: 1.5:1 Max 3 dB Slope: 1.8:1 Max 4 dB Slope: 1.8:1 Min	1.50:1 Typical, 1.70:1 Max
Input Power CW	0.25 Watts	200 mW
Peak Power	-	2.0 Watts Max (Based on 10 $\mu$ S pulse width and 1.0% Duty Cycle)

## Environmental

Operating Temperature	-55°C to +150°C
Storage Temperature	-65° to +150°C
Moisture Sensitivity Level	1 - Unlimited

## Mechanical

Configuration	Surface Mount	
Package Size	Varies based on Slope and Frequency Requirements	
Substrate Material	Alumina (Al <sub>2</sub> O <sub>3</sub> )	
Terminal Material	Thick Film, Nickel Barrier, Solderable Silver Plating	Thin Film Solderable Gold
Ground Plane Material	Thick Film, Nickel Barrier, Solderable Silver Plating	Thin Film Solderable Platinum
Resistive Element	Thin Film Nickel Chromium (NiCr)	Thin Film Tantalum Nitride (TaN)

## Marking

Unit Marking	Part Mark Code, based on slope and frequency	None
--------------	--	------

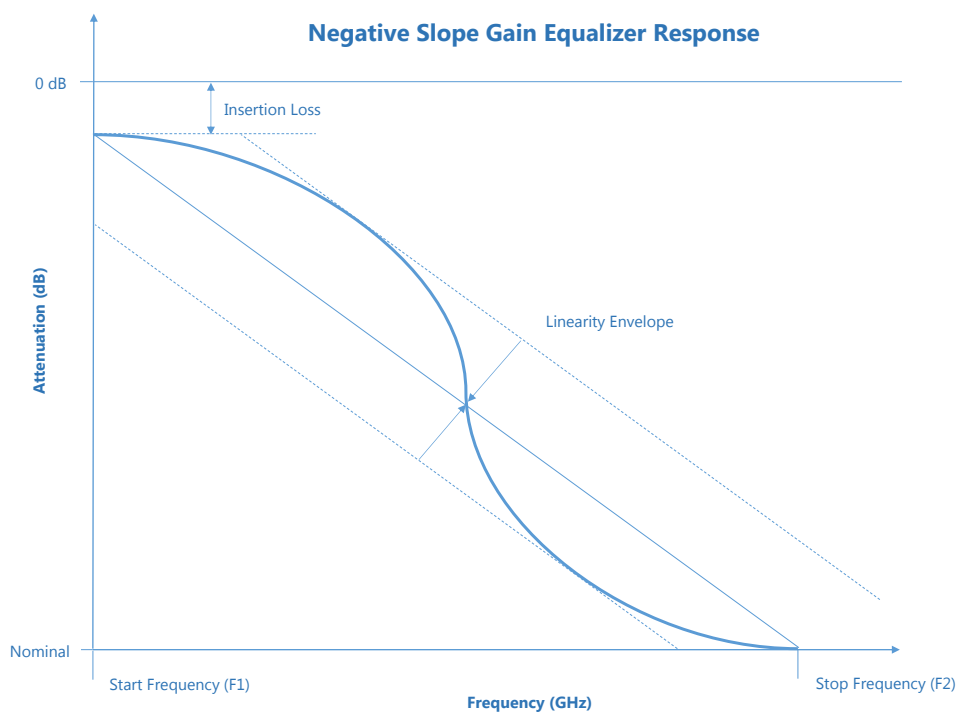
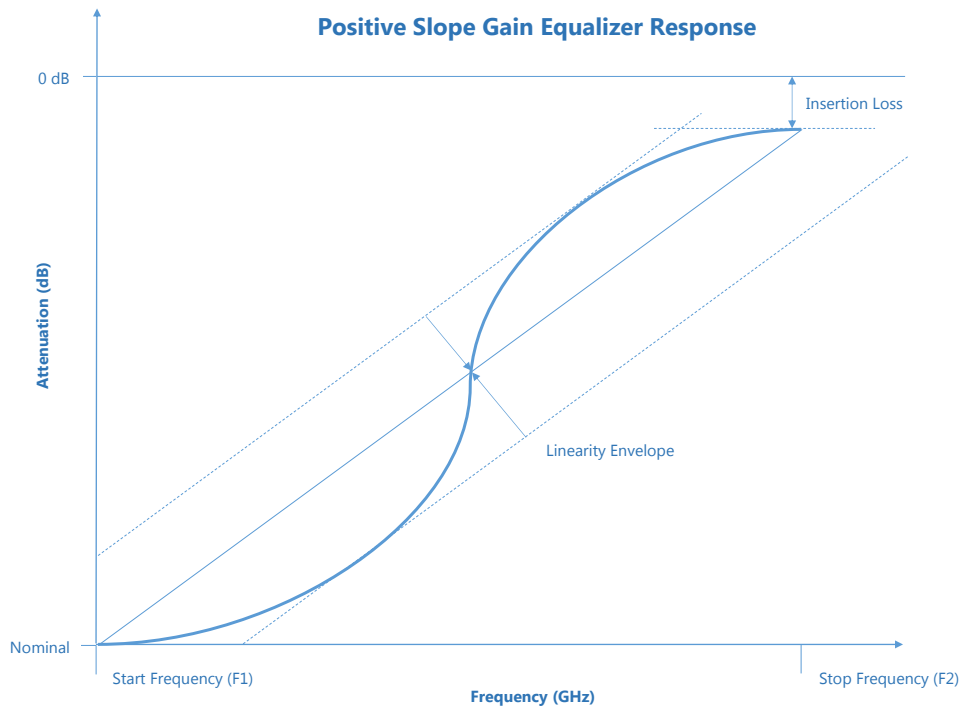
## Quality Assurance

	Sample visual and mechanical inspection - 1.0 AQL per mechanical drawing requirements. Periodic electrical inspection performed for commercial grade products. High Reliability tested products are available.
--	--

## Packaging

Standard Packaging	Waffle Pack or Tape and Reel
--------------------	------------------------------

# Electrical



# Available Values

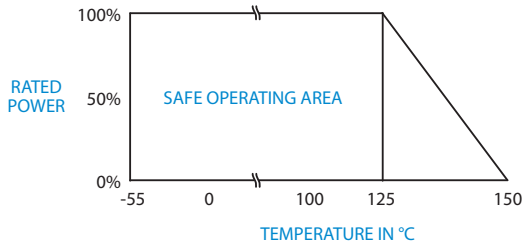
## Standard Equalizer Values

Part Number	SLOPE (dB) Negative	Part Mark Code	Start Frequency (GHz)	Stop Frequency (GHz)	$\Delta F$ (GHz)
CE 1 015 P 029 SMTF	1	140	1.5	2.9	1.4
CE 1 015 P 035 SMTF	1	130	1.5	3.5	2
CE 1 020 P 040 SMTF	1	127	2	4	2
CE 1 025 P 045 SMTF	1	125	2.5	4.5	2
CE 1 030 P 055 SMTF	1	120	3	5.5	2.5
CE 1 035 P 070 SMTF	1	115	3.5	7	3.5
CE 1 040 P 075 SMTF	1	112	4	7.5	3.5
CE 1 050 P 095 SMTF	1	110	5	9.5	4.5
CE 2 007 P 028 SMTF	2	240	0.7	2.8	2.1
CE 2 010 P 030 SMTF	2	235	1	3	2
CE 2 010 P 035 SMTF	2	230	1	3.5	2.5
CE 2 010 P 040 SMTF	2	227	1	4	3
CE 2 015 P 045 SMTF	2	225	1.5	4.5	3
CE 2 020 P 055 SMTF	2	220	2	5.5	3.5
CE 2 020 P 065 SMTF	2	215	2	6.5	4.5
CE 2 025 P 070 SMTF	2	212	2.5	7	4.5
CE 2 030 P 090 SMTF	2	210	3	9	6
CE 3 005 P 027 SMTF	3	340	0.5	2.7	2.2
CE 3 008 P 035 SMTF	3	330	0.8	3.5	2.7
CE 3 010 P 030 SMTF	3	332	1	3	2
CE 3 010 P 040 SMTF	3	327	1	4	3
CE 3 010 P 045 SMTF	3	325	1	4.5	3.5
CE 3 015 P 055 SMTF	3	320	1.5	5.5	4
CE 3 015 P 065 SMTF	3	315	1.5	6.5	5
CE 3 015 P 070 SMTF	3	312	1.5	7	5.5
CE 3 020 P 090 SMTF	3	310	2	9	7
CE 4 010 P 030 SMTF	4	426	1	3	2
CE 3 005 N 027 SMTF	3	340	0.5	2.7	2.2

## High Frequency Equalizer Values

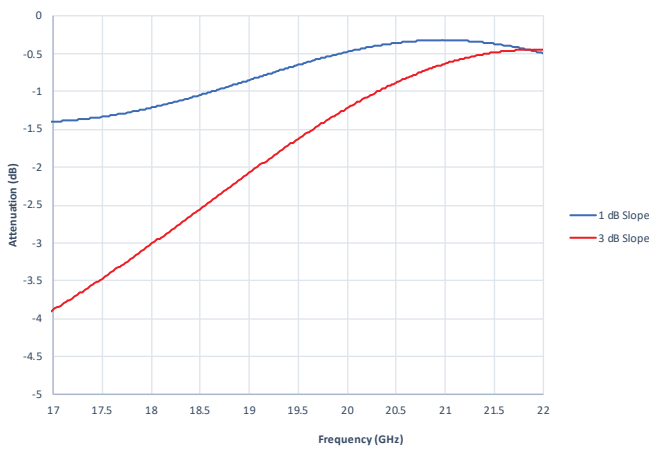
CEHF 1 170 P 220 SMTF	1	N/A	17	22	5
CEHF 3 170 P 220 SMTF	3	N/A	17	22	5
CEHF 1 270 P 320 SMTF	1	N/A	27	32	5
CEHF 3 270 P 320 SMTF	3	N/A	27	32	5

# Power Derating Curve

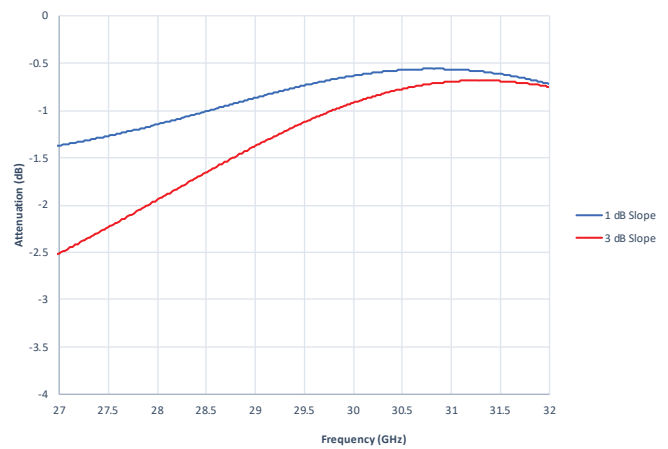


# Typical Data

High Frequency Chip Equalizer Band 1

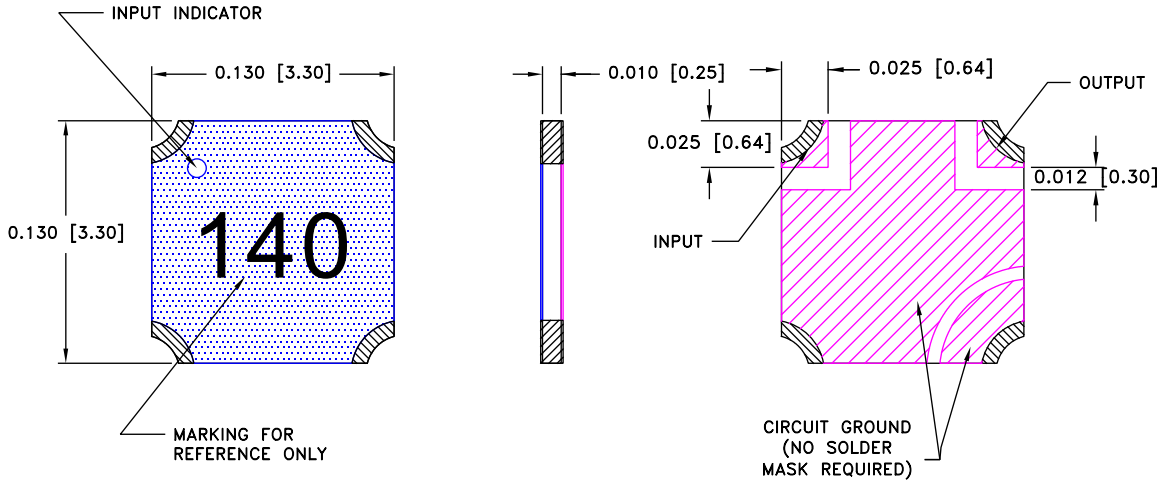


High Frequency Chip Equalizer Band 3

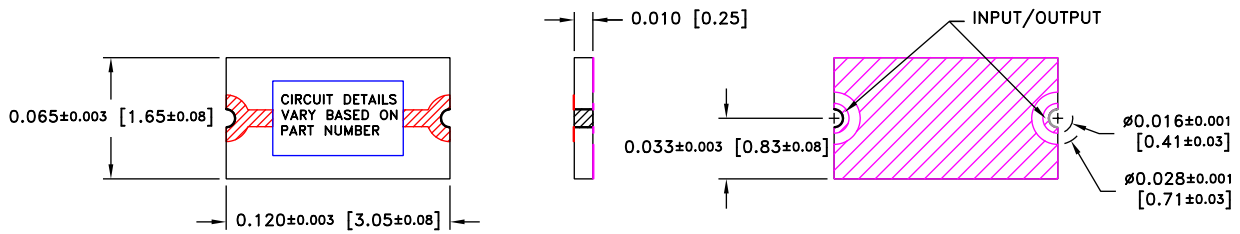


# Mechanical

## Standard Series



## High Frequency Band 1 Series



## High Frequency Band 3 Series

