Smith Chart

WAVELENGTHS TOWARD GENERATOR →

← WAVELENGTHS TOWARD LOAD

INDUCTIVE REACTANCE COMPONENT (+jX/Zo), OR CAPACITIVE SUSCEPTANCE (+jB/Yo)

RESISTANCE COMPONENT (R/Zo), OR CONDUCTANCE COMPONENT (G/Yo)

CAPACITIVE REACTANCE COMPONENT (-jX/Zo), OR INDUCTIVE SUSCEPTANCE (-jB/Yo)

ANGLE OF REFLECTION COEFFICIENT IN DEGREES

ANGLE OF TRANSMISSION COEFFICIENT IN DEGREES

RADIALLY SCALED PARAMETERS

TOWARD LOAD →   ← TOWARD GENERATOR

SWR	ATTEN. (dB)
RTN. LOSS (dB)	S.W. LOSS COEFF
RFL. COEFF P	RFL. LOSS (dB)
	S.W. PEAK (CONST. P)
RFL. COEFF. E.or I	TRANSM. COEFF. P
	TRANSM. COEFF. E.or I

SWR: ∞ 100 40 20 10 5 4 3 2.5 2 1.8 1.6 1.4 1.2 1.1 1
15 10 7 5 4 3 2 1

dBs: ∞ 40 30 20 15 10 8 6 5 4 3 2 1 1
1.1 1.2 1.3 1.4 1.6 1.8 2 3 4 5 10 20 ∞

0 1 2 3 4 5 6 7 8 9 10 12 14 20 30 ∞ 0
0.1 0.2 0.4 0.6 0.8 1 1.5 2 3 4 5 6 10 15 ∞

1 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0.05 0.01 0
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2 2.5 3 4 5 10 ∞

1 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0
1 0.99 0.95 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0

CENTER

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2

ORIGIN