

- LTE 450 SAW DUPLEXER For 455.0 MHz / 465.0 MHz
- Revision 0: February 2014

Electrical Characteristics

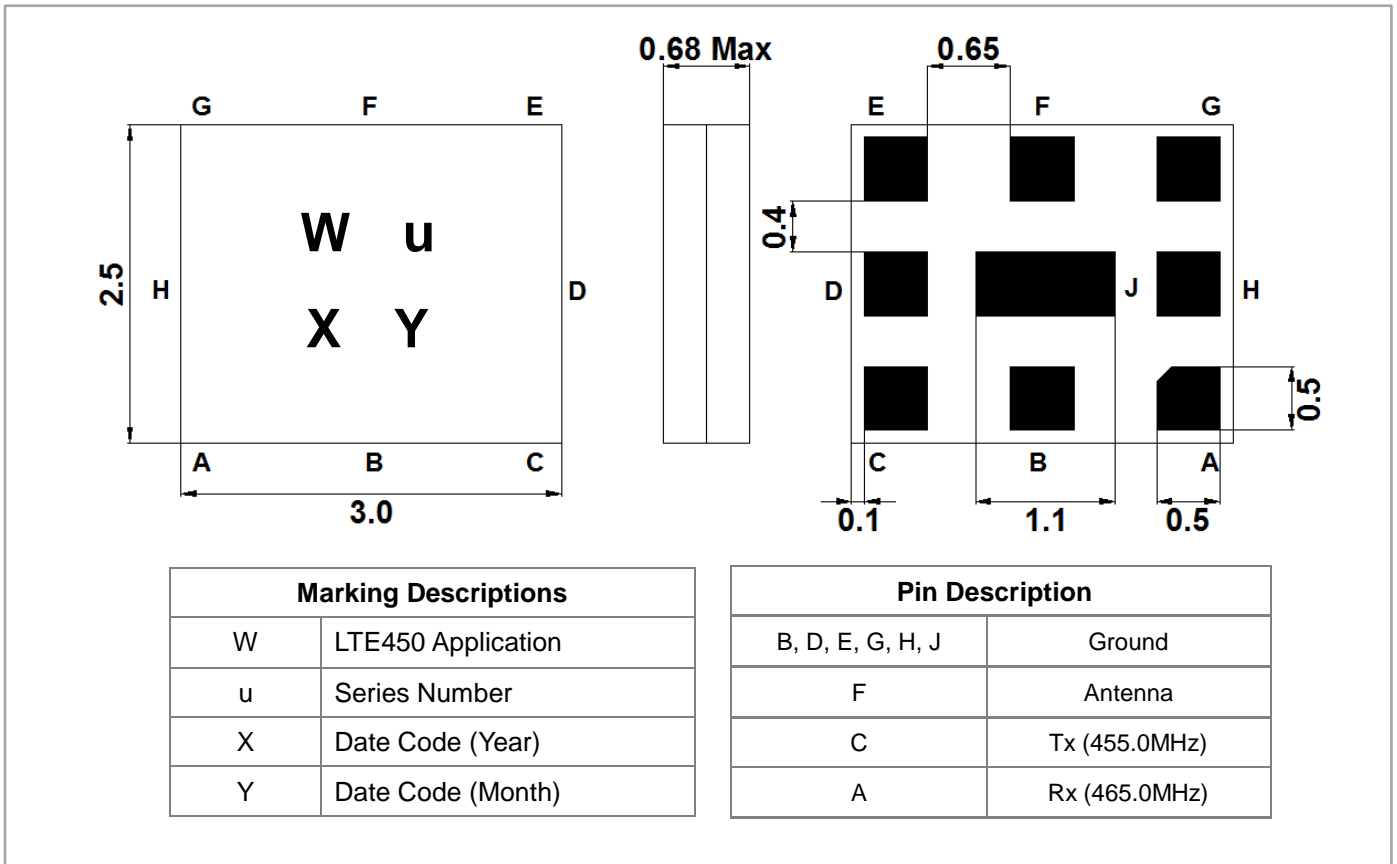
MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operating Temperature Range	°C	-20	-	+90
Storage Temperature Range	°C	-40	-	+90
Maximum DC Voltage	V	-	0	-
Input Power Level	dBm	28	-	30
Antenna Impedance(single ended) ⁽¹⁾	Ω	50		
Tx Impedance(single ended) ⁽¹⁾	Ω	50		
Rx Impedance(single ended) ⁽¹⁾	Ω	50		
Package type & size	C80			
Length x Width	mm ²	-	3.0 x 2.5	-
Height	mm	-	0.68	-

ELECTRICAL SPECIFICATION					
PARAMETERS	CONDITION [MHZ]	UNIT	MINIMUM	TYPICAL	MAXIMUM
Tx (455.0MHz)→ Ant		Specifications			
Insertion Loss within 452.75 ~ 457.25 MHz Avg over full inner 4.5 MHz		dB	-	1.4	2.5
Amplitude Ripple within 452.75 ~ 457.25 MHz		dB _{p-p}	-	0.8	1.5
VSWR(Tx Port) within 452.75 ~ 457.25 MHz		-	-	1.6	2.0
VSWR(Ant. Port) within 452.75 ~ 457.25 MHz		-	-	1.6	2.0
Absolute Attenuation:					
10.0 ~ 430.0 MHz		dB	25	30	-
442.75 ~ 447.25 MHz (Rx Image Band)		dB	25	32	-
462.75 ~ 467.25 MHz (Rx Band Rejection)		dB	45	60	-
480.0 ~ 1100.0 MHz (Including 2 nd harmonic)		dB	25	30	-
1200.0 ~ 1500.0 MHz (Including 3 rd harmonic)		dB	30	35	-
1500.0 ~ 1600.0 MHz (Including GPS/GLONASS)		dB	35	40	-
1600.0 ~ 4000.0 MHz (Including DCS band)		dB	18	22	-
4000.0 ~ 8500.0 MHz		dB	10	15	-

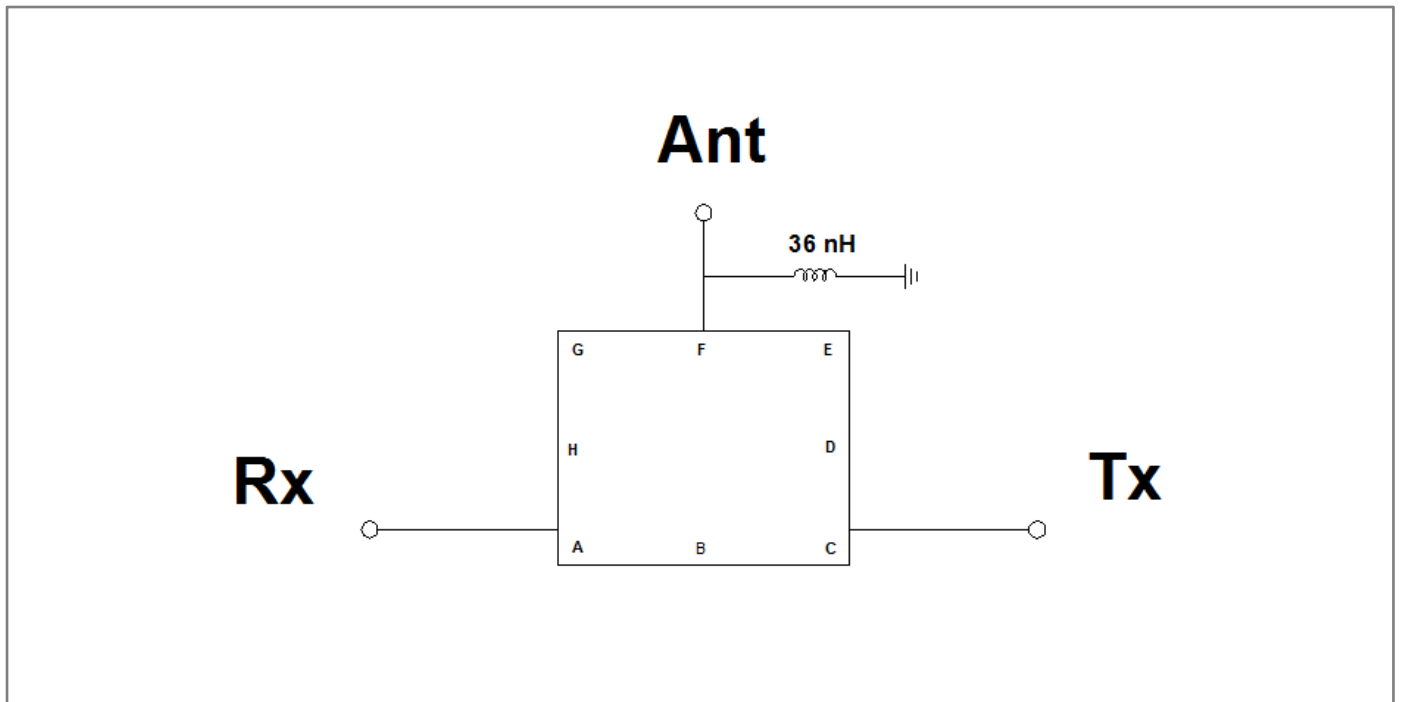
PARAMETERS	CONDITION [MHZ]	UNIT	MINIMUM	TYPICAL	MAXIMUM
Ant → Rx (465.0MHz)		Specifications			
Insertion Loss within 462.75 ~467.25 MHz Avg over full inner 4.5 MHz		dB	-	1.8	2.5
Amplitude Ripple within 462.75 ~467.25 MHz		dB _{p-p}	-	1.1	1.5
VSWR (Rx Port) within 462.75 ~ 467.25 MHz		-	-	1.6	2.0
VSWR (Ant. Port) within 462.75 ~ 467.25 MHz		-	-	1.8	2.1
Absolute Attenuation:					
10.0 ~ 451.0 MHz		dB	35	40	-
452.75 ~ 457.25 MHz (Tx Band Rejection)		dB	40	45	-
475.0 ~ 480.0 MHz (Tx Image Rejection)		dB	40	60	-
481.0 ~ 8500.0 MHz		dB	10	15	-
Tx → Rx		Specifications			
Isolation within 452.75 ~457.25 MHz Avg over full inner 4.5 MHz		dB	45	55	-
Isolation within 462.75 ~467.25 MHz Avg over full inner 4.5 MHz		dB	50	65	-

Notes: (1) With Matching Network.

Package Dimensions

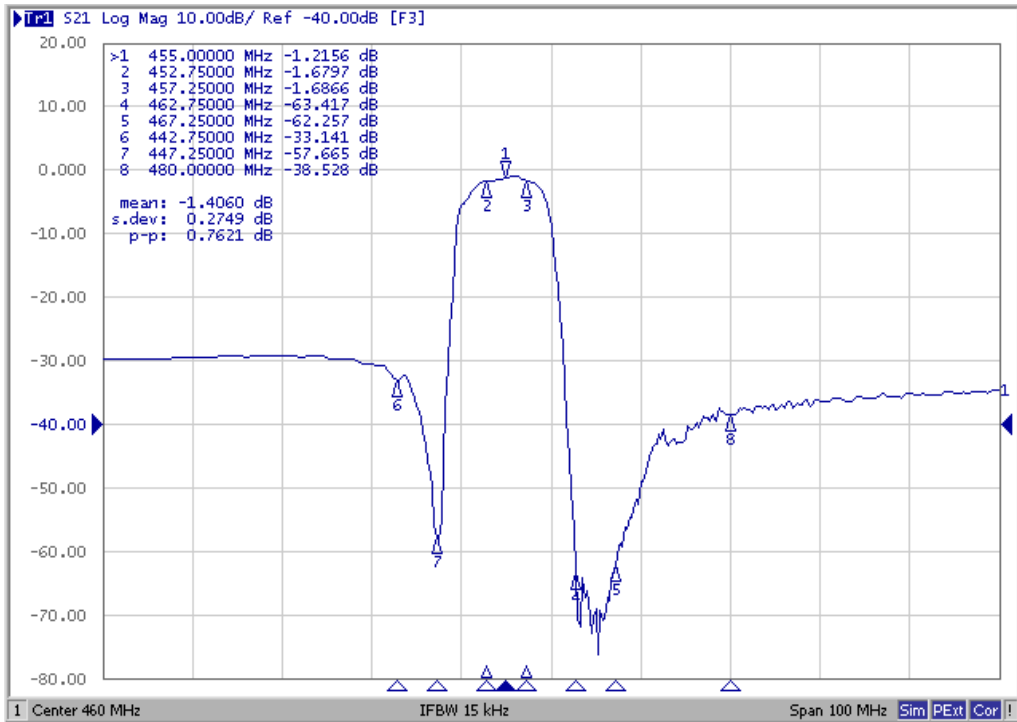


Testing Environment

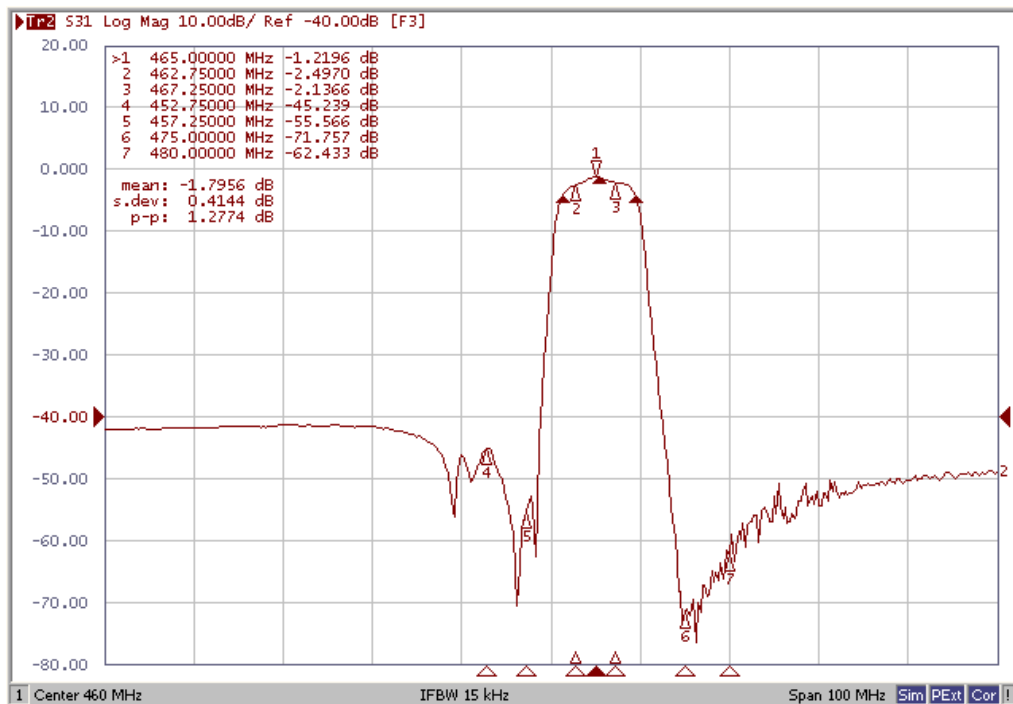


Frequency Characteristics

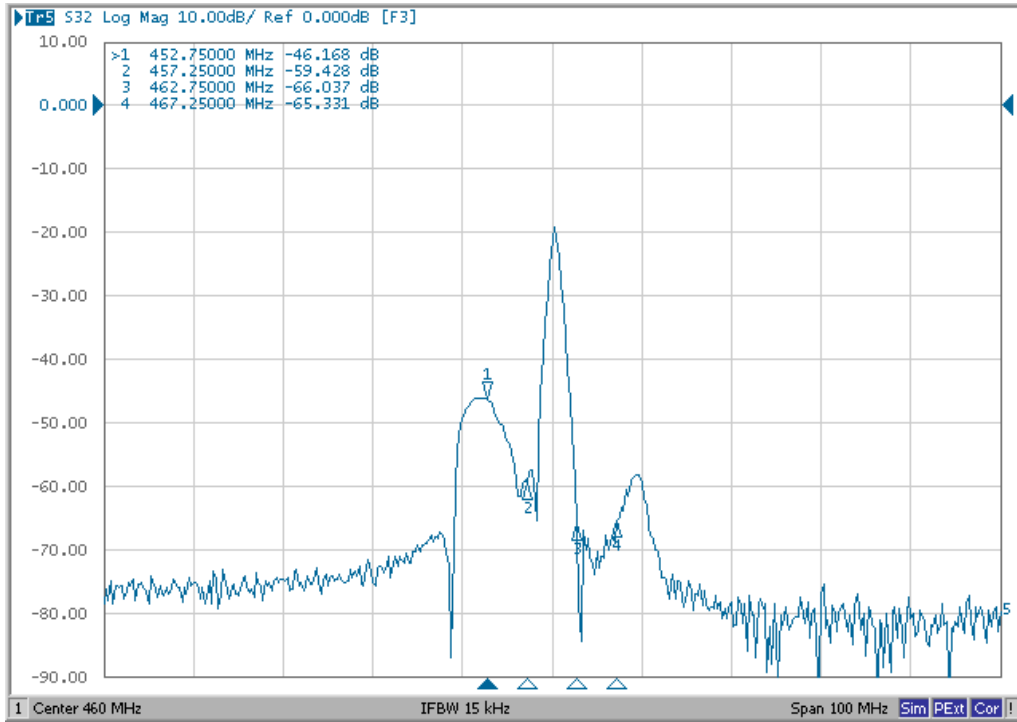
Tx to Ant



Ant to Rx

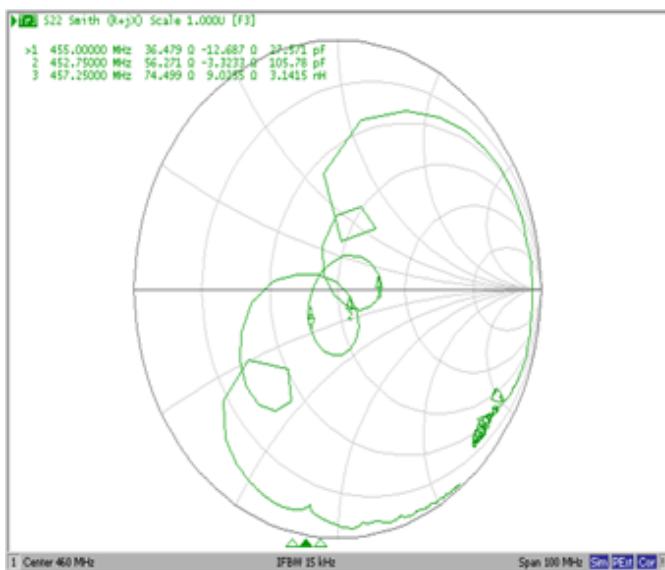


Isolation

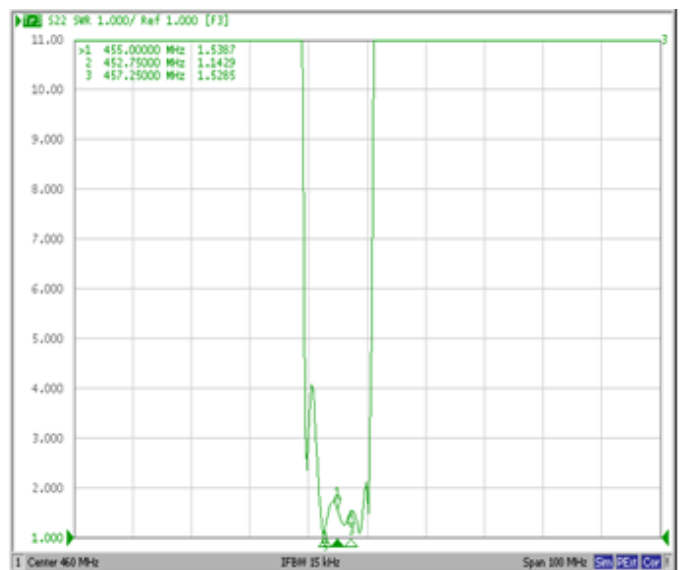


Tx Port

Smith Chart



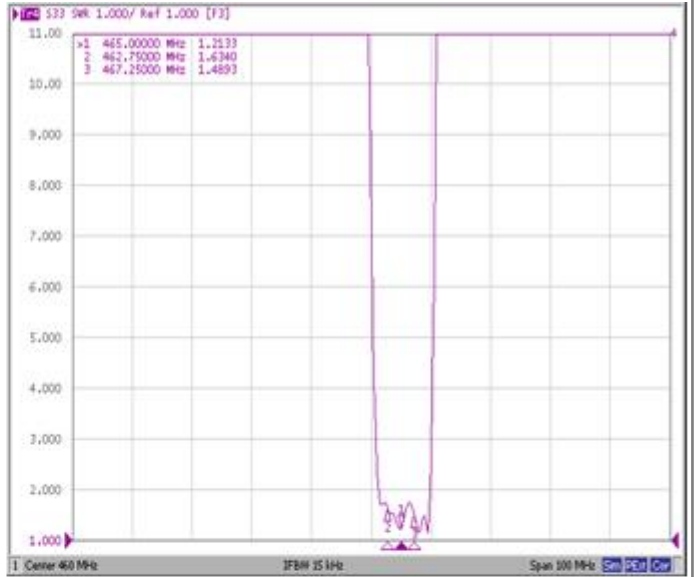
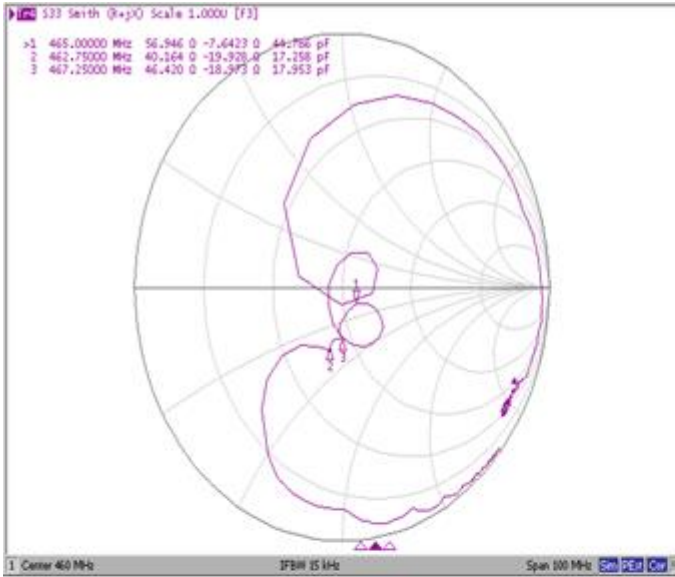
VSWR



Rx Port

Smith Chart

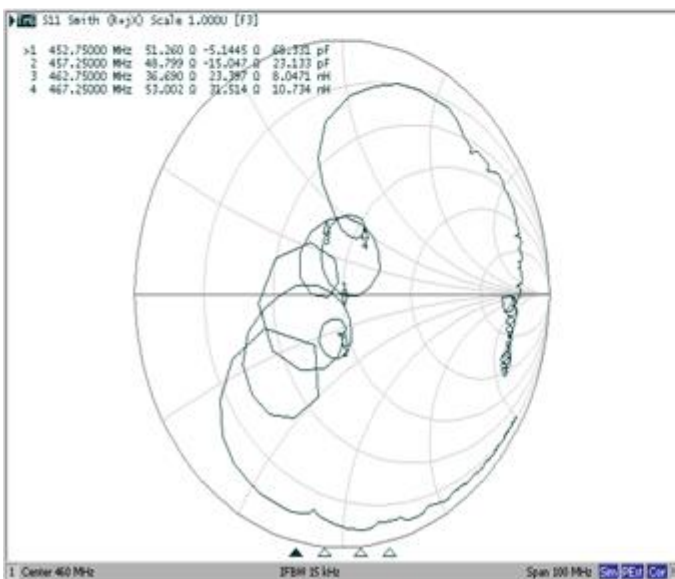
VSWR



Ant Port

Smith Chart

VSWR



Wide Span

