

CER0645F

1518-1559/1626-1675 MHz Duplexer

Features

- Low Loss
- Low Ripple
- Small Size

Applications

Satellite Communication applications

Description

Surface mount ceramic duplexer. Provides superior rejection, insertion loss, reliability, as well as both peak and average power handling compared to other duplexer technologies.

Electrical Specifications

Parameter	Frequency (MHz)	Typical at 25°C	Spec. at 25°C	Spec. over -40°C to +85°C
Nominal Impedance	-	50 ohms	-	-
Average Input Power	-	-	-	2.0 Watt max
Peak Input Power	-	-	-	20.0 Watt max

Antenna to UL Response

Passband Insertion Loss	1518 - 1559	1.0 dB	1.2 dB max	1.3 dB max
Passband Insertion Ripple	1518 - 1559		0.5 dB max	0.6 dB max
Passband Return Loss	1518 - 1559		14 dB min	14 dB min
Attenuation:	1626 - 1675		>50 dB min	>50 dB min

DL to Antenna Response

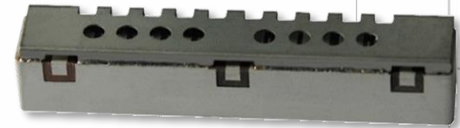
Passband Insertion Loss	1626 - 1675	1.3 dB	1.4 dB max	1.5 dB max
Passband Insertion Ripple	1626 - 1675		0.5 dB max	0.6 dB max
Passband Return Loss	1626 - 1675		14 dB min	14 dB min
Attenuation:	1518 - 1559		>40 dB min	>40 dB min

DL to UL Response

Attenuation for UL band	1518 - 1559		>40 dB min	>40 dB min
Attenuation for DL band	1626 - 1675		>50 dB min	>50 dB min

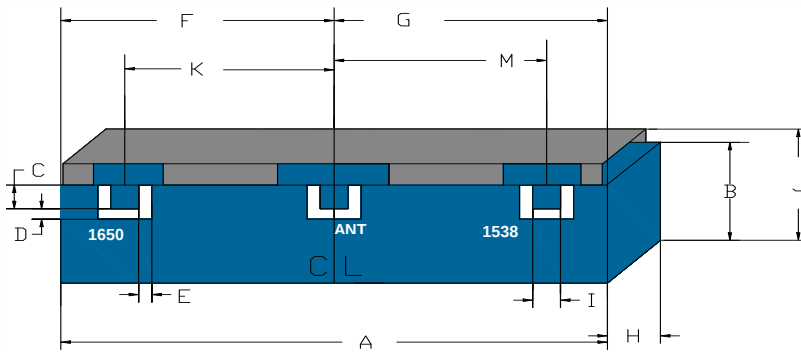
Note: CTS tests each unit to the critical specifications above. Subsequent audits may deviate due to repeatability among different test systems which shall not exceed these allowances.

Specification Allowance	
Insertion Loss	0.1 dB
Return Loss	1.0 dB
Attenuation	1.0 dB



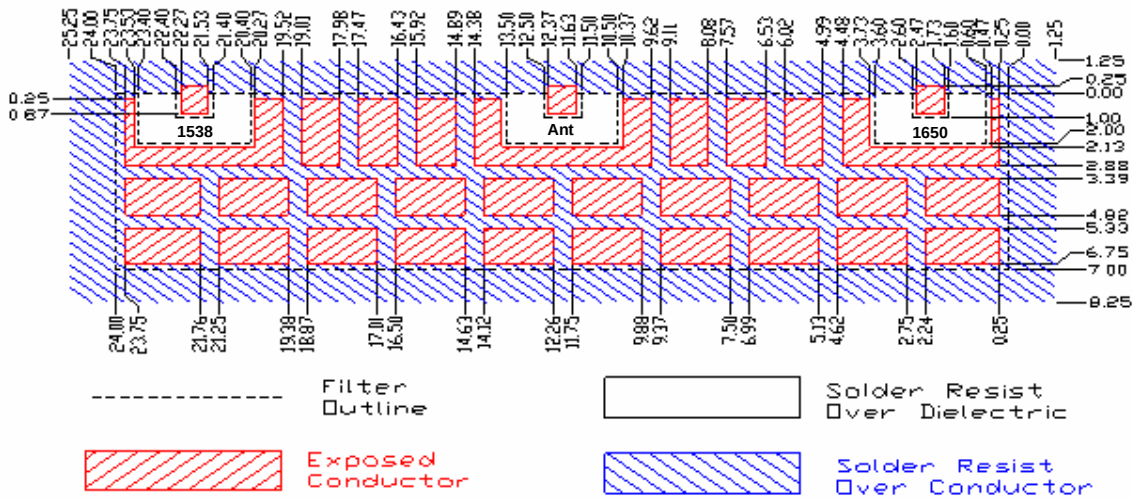
Part Dimensions: 20.0 × 8.0 × 4.6 mm • 3.6 g
Materials: Ag plated ceramic block with tin plated brass shield

Mechanical Drawing



Dim.	Nominal (mm)	Tolerance (±mm or Max)
A	24.00	max
B	7.00	max
C	1.02	0.13
D	1.02	0.25
E	1.02	0.13
F	11.87	0.13
G	11.87	0.13
H	4.60	max
I	1.02	0.13
J	8.00	max
K	9.90	0.13
M	9.90	0.13

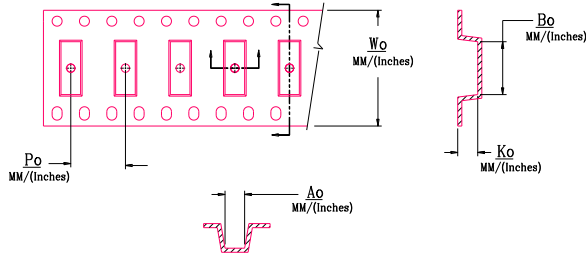
PCB Layout



Packaging and Marking

DIMENSION	UNITS	SPECIFICATION
REEL DIAMETER	mm	330
REEL WEIGHT	kg	2.3
REEL QUANTITY	ea.	500

CTS
45F
YWW



Wo	Ao	Bo	Ko	Po
Inches/mm	Inches/mm	Inches/mm	Inches/mm	Inches/mm
1.732" / 44.0	0.329" / 8.53	0.960" / 24.35	0.195" / 4.95	0.472" / 12.0

Electrical Response

