

SMI 70-S(XX)

450 MHz Ceramic Microplexer



DESCRIPTION:

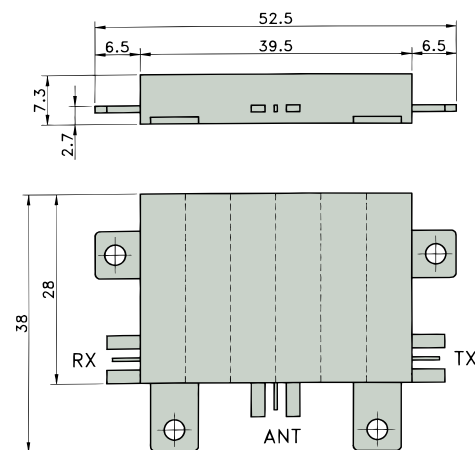
- ★ Extremely small and lightweight ceramic duplexer (Extremely small: only 8 cm³!).
- ★ Ideal for integration in portable 450 MHz cellular radio telephones.
- ★ Low insertion loss by use of high-performance ceramic materials and computer optimized interconnection networks.
- ★ Rugged mechanical design and low temperature drift.
- ★ High power handling – handles 30 watts at 85° C when mounted on a 25 cm² heatsink!
- ★ Designed for direct drop-in on microstrip PCB.
- ★ Coplanar terminals save space and provide ease-of-manufacturing and a non-discontinuity interface to the PCB.
- ★ Rejection of image frequency of receiver.
- ★ Environment proof.



COMMON SPECIFICATIONS:

ELECTRICAL	
MODEL	SMI 70-S(XX)
FREQUENCY RANGE	400-475 MHz
MAX. INPUT POWER	6 watts without heatsink 30 watts with heatsink
IMPEDANCE	Nom. 50 Ω
MECHANICAL	
TEMP. RANGE	-30° C → +85° C
CONNECTIONS	Drop-in, coplanar
TOTAL DIMENSIONS (L x W x H)	52.5 x 38 x 7.3 mm
HOUSING ONLY (L x W x H)	39.5 x 28 x 7.3 mm
WEIGHT	Approx. 35g

FUNCTIONAL DIMENSIONS:



Detailed installation drawing available upon request.

SPECIFICATIONS:

PORT SEPARATION TX-RX	10 MHz		10 MHz		10 MHz	
	4.5 MHz		1 MHz		Single frequency	
PORT WIDTH	4.5 MHz		1 MHz		Single frequency	
BRANCH	TX → Ant.	Ant. → RX	TX → Ant.	Ant. → RX	TX → Ant.	Ant. → RX
INSERTION LOSS IN PASSBAND	≤ 2.3 dB	≤ 3.5 dB	≤ 1.5 dB	≤ 2.4 dB	≤ 1.4 dB	≤ 2.2 dB
ATTENUATION IN STOPBAND	> 35 dB	> 42 dB	> 55 dB	> 60 dB	> 60 dB	> 70 dB
SWR	≤ 1.5		≤ 1.4		≤ 1.3	

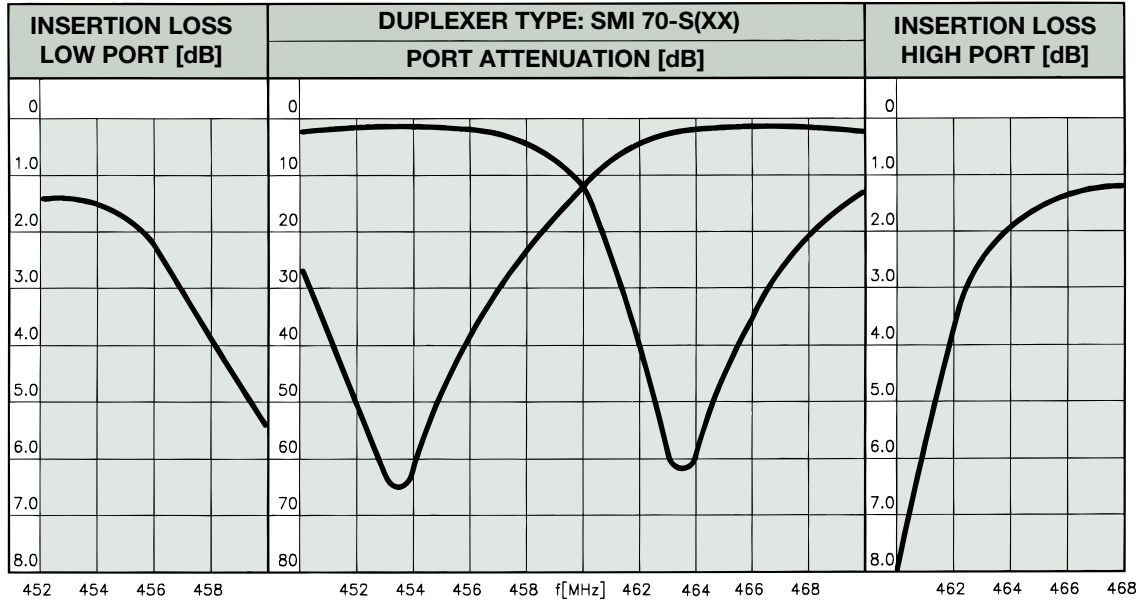
PROCOM A/S reserve the right to amend specifications without prior notice.

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TYPICAL RESPONSE CURVES @ 1 MHz DUPLEX SPACING:



TYPICAL RESPONSE CURVES @ 4.5 MHz DUPLEX SPACING:

