

MIX 70-CEL-Z(XX)

Ultra-Compact Build-in type Duplexer
for 450 MHz Cellular Radio Telephones



DESCRIPTION:

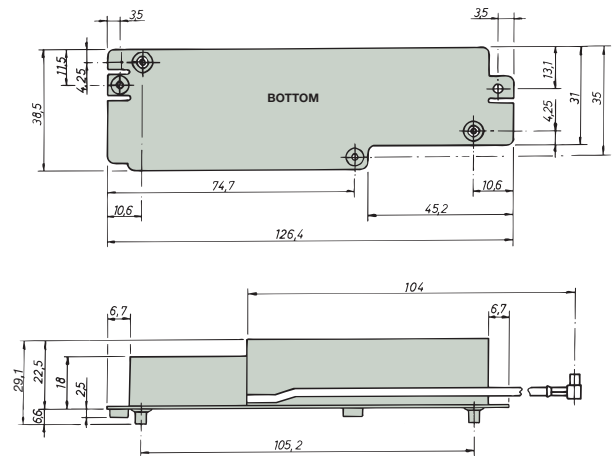
- ★ Miniaturized, light-weight, component-sized duplexer.
- ★ Ideal for integration in compact 450 MHz cellular radio telephones.
- ★ Type MCX-male TX and RX connectors on bottom side of filter for direct plug-in on PCB.
- ★ "Flying lead" MCX-male antenna terminal.
- ★ Low insertion loss and temperature drift.
- ★ Rugged mechanical design.
- ★ 3 cavities in TX-branch, 4 cavities in RX-branch.
- ★ Bandpass-response on RX-port.
- ★ Fully environmentally tested.
- ★ Fits Motorola type "CIMBER 1" devices (see model survey below).



GENERAL SPECIFICATIONS:

ELECTRICAL	
MODEL	MIX 70-CEL-Z(XX)
MAX. INPUT POWER	25 watts
IMPEDANCE	Nom. 50 Ω
SWR (All ports)	≤ 1.5
MECHANICAL	
TEMP. RANGE	Operating : -30° C → +85° C Storage : -40° C → +90° C
CONNECTIONS	Bottom side : 2 x MCX-male (TX and RX) Flying lead : 1 x MCX-male (Ant.)
LENGTH	127 mm
WIDTH	39 mm
HEIGHT	With connectors : 29 mm Housing alone : 23 mm
WEIGHT	Approx. 80 g

FUNCTIONAL DIMENSIONS:



SPECIFICATION EXAMPLES:

MODEL	MIX 70-CEL-Z(02)		MIX 70-CEL-Z(01)		MIX 70-CEL-Z(11)	
CELLULAR NETWORK	Scandinavian NMT-450		C-Net		Radiocom 2000	
TX FREQUENCY	453.0-457.5 MHz		451.0-455.75 MHz		414.8-418.0 MHz	
RX FREQUENCY	463.0-467.5 MHz		461.0-465.75 MHz		424.8-428.0 MHz	
BRANCH	TX → Ant.	Ant. → RX	TX → Ant.	Ant. → RX	TX → Ant.	Ant. → RX
INSERTION LOSS IN PASSBAND	≤ 1.7 dB	≤ 4.0 dB	≤ 1.7 dB	≤ 4.0 dB	≤ 1.8 dB	≤ 4.2 dB
ATTENUATION IN STOPBAND	> 60 dB	> 60 dB	> 60 dB	> 60 dB	> 60 dB	> 60 dB
OUT OF BAND REJECTION	2. harm.: > 40 dB 3. harm.: > 40 dB 4. harm.: > 40 dB	< 453 MHz: > 55 dB 498-508 MHz: > 30 dB 0.5-2 GHz: > 35 dB	2.-5. harm.: > 40 dB 6.-8. harm.: > 30 dB	< 451 MHz: > 55 dB 482-487 MHz: > 30 dB 0.5-2 GHz: > 30 dB	2. harm.: > 40 dB 3. harm.: > 40 dB 4. harm.: > 40 dB	< 414.8 MHz: > 55 dB 459.8-470 MHz: > 30 dB 0.5-2 GHz: > 35 dB

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

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MODEL SURVEY:

PROCOM TYPE NO.	CELLULAR NETWORK	MOTOROLA PART NO.
MIX 70-CEL-Z(01)	C-NET (Narrow)	91R02036Z01
MIX 70-CEL-Z(02)	NMT-450	91R02036Z02
MIX 70-CEL-Z(03)	Saudi band 1 (SAU1)	91R02036Z03
MIX 70-CEL-Z(04)	Saudi band 2 (SAU2)	91R02036Z04
MIX 70-CEL-Z(05)	Hungary (HUN)	91R02036Z05
MIX 70-CEL-Z(06)	Spain (ESP)	91R02036Z06
MIX 70-CEL-Z(07)	C-NET (Extended)	91R02036Z07
MIX 70-CEL-Z(08)	Malaysia (MAL)	91R02036Z08
MIX 70-CEL-Z(09)	Turkey (TK)	91R02036Z09
MIX 70-CEL-Z(10)	Poland (POL)	91R02036Z10
MIX 70-CEL-Z(11)	France (R2000)	91R02036Z11
MIX 70-CEL-Z(15)	France (SFR)	91R02036Z15

TYPICAL RESPONSE CURVES:

