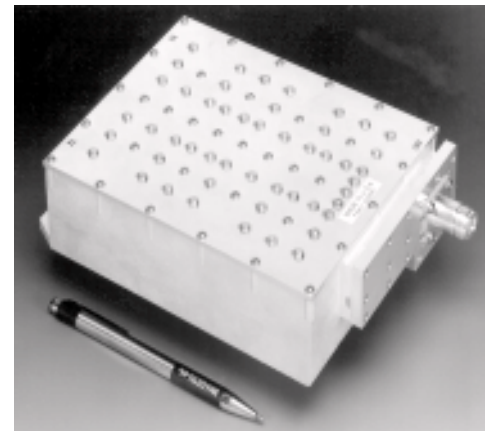


## 4778 GSM 1800 DUPLEXER

### Features:

- ❖ Temperature Stability better than Aluminum
- ❖ Low Loss (1.0 dB, Typical)
- ❖ Lightweight, Injection Molded Housing
- ❖ 50 watts CW Power Handling
- ❖ Available from Stock
- ❖ Low Cost



### Product Description:

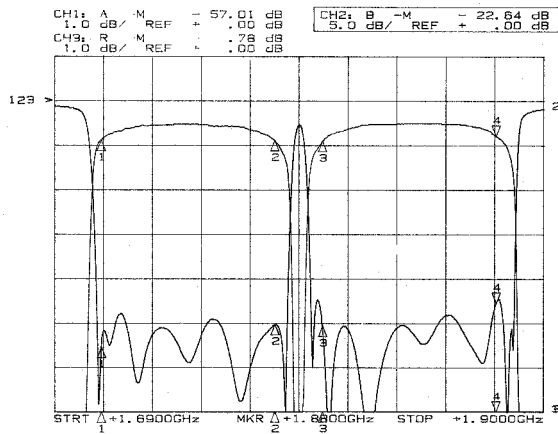
The 4778 duplexer is designed to provide high isolation in GSM 1800 applications. This duplexer uses an injection molded plastic housing, a patented technology that has been fully qualified and deployed in applications worldwide for nearly a decade. The 4778 offers high isolation, provides low insertion loss, and greater temperature stability than aluminum. The lightweight, low cost features of this product makes it ideal for applications such as micro basestations, tower mounted amplifiers, repeaters, and smart/adaptive antennas. Teledyne offers these duplexers from inventory. Custom designs are also available upon request with a minimal lead-time.

**TABLE OF SPECIFICATIONS**

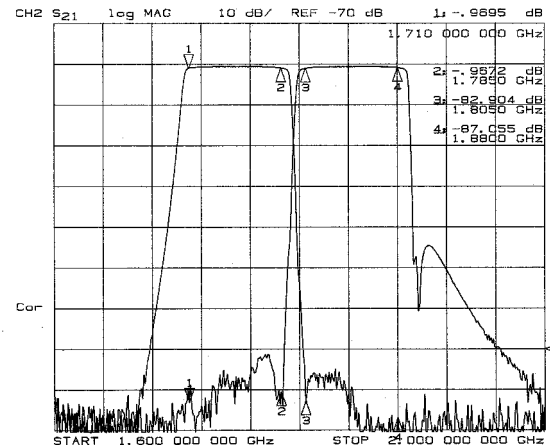
PARAMETER	FREQUENCY (MHz)	SPECIFICATIONS (GUARANTEED / TYPICAL)
<b>Receive Band:</b>		
Passband	1710 - 1785 MHz	
Insertion Loss	1710 - 1785 MHz	1.1 dB max. / 0.9 dB
Insertion Loss Ripple	1710 - 1785 MHz	<0.60 dB / 0.40 dB
Input / Output VSWR	1710 - 1785 MHz	1.40:1 max. / 1.20:1
<b>Transmit Band:</b>		
Passband	1805 - 1880 MHz	
Insertion Loss	1805 - 1880 MHz	1.1 dB max. / 0.9 dB
Insertion Loss Ripple	1805 - 1880 MHz	<0.60 dB / 0.40 dB
Input / Output VSWR	1805 - 1880 MHz	1.40:1 max. / 1.20:1
<b>Interchannel Isolation:</b>		
Tx to Rx	1710 - 1785 MHz	71 dB min. / 75 dB
Rx to Tx	1805 - 1880 MHz	71 dB min. / 75 dB
<b>Weight</b>		
		28 oz. / 790 grams
<b>Power Handling (CW)</b>		
		50 watts
<b>Operating Temperature</b>		
		-30°C to +70°C
<b>Storage Temperature</b>		
		-54°C to +85°C

## 4778 GSM 1800 DUPLEXER

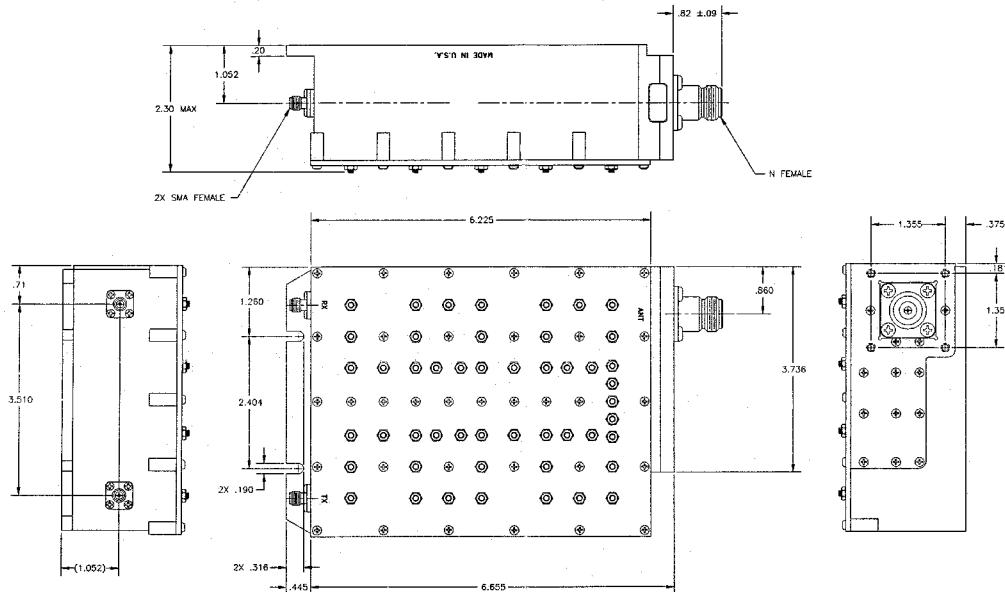
**Typical Insertion Loss and VSWR**



**Typical Rx to Tx and Tx to Rx Rejection**



**Outline Drawing**



Teledyne reserves the right to make changes without further notice to any specifications herein. "Typical" parameters can and do vary in different applications.