

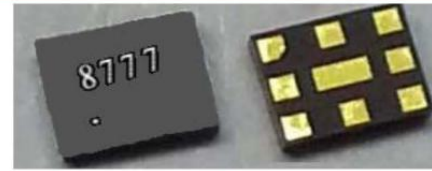


Application

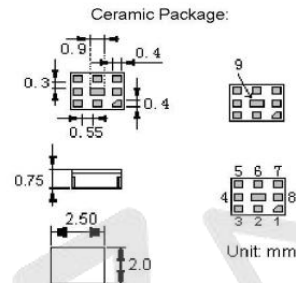
- Low-loss SAW duplexer for mobile telephone
- Low amplitude ripple
- Low insertion attenuation

Features

- CSP
- RoHS compatible
- Package size 2.5x2.0
- Approx. weight 0.014g
- Electrostatic Sensitive Device(ESD)



Package Dimensions



Pin Configuration

6	Antenna
3	TX Input
1	RX Output
2, 4, 5, 7, 8, 9	To Be Grounded

Marking



Top View, Laser Marking

- "ND": Manufacturer's mark
- "F": SAW filter
- "8777": Part number
- ".": Terminal 1
- "*": Lot number (The code shown below varies in a 4-year cycle)

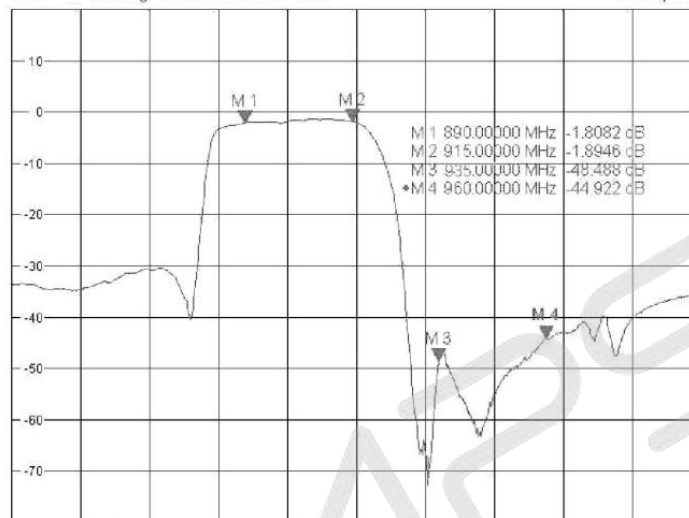
Code	1	2	3	4	5	6	7	8	9	10	11	12
2009	A	B	C	D	E	F	G	H	J	K	L	M
2010	N	P	Q	R	S	T	U	V	W	X	Y	Z
2011	a	b	c	d	e	f	g	h	i	j	k	m
2012	n	p	q	r	s	t	u	v	w	x	y	z

Maximum Ratings

Rating	Value	Unit
Operating Temperature Range	T_A	-30 ~ +85 °C
Storage Temperature Range	T_{stg}	-40 ~ +85 °C
DC Voltage (between any Terminals)	V_{DC}	5 V
RF Power (in BW)	P	27 max dBm
ESD Voltage (HB)	V_{ESD}	400 V

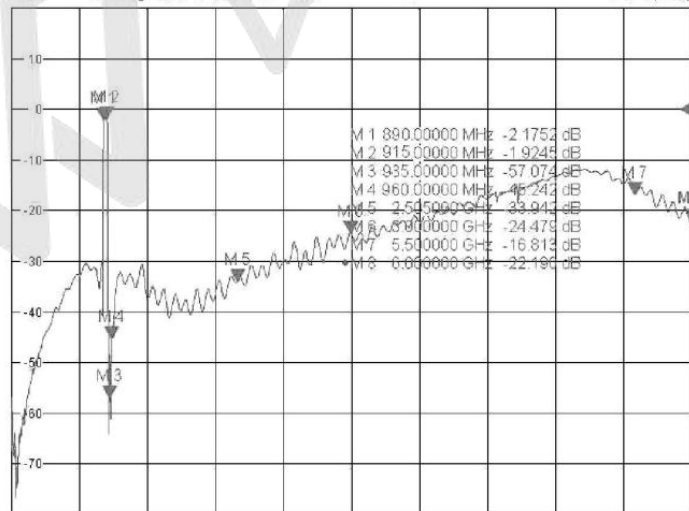
Typical Frequency Response TX-ANT

Trc2 dB Mag 10 dB / Ref 0 dB Cal 2 of 4 (Max)



Ch1 Center 917MHz Pwr 0 dBm Span 170 MHz


Trc2 dB Mag 10 dB / Ref 0 dB Cal 2 of 4 (Max)



Ch1 Start 10 MHz Pwr 0 dBm Stop 6 GHz

SAW Duplexer**NDF8777****902.5/947.5MHz****Electrical Characteristics TX-ANT:**Antenna terminating impedance: $Z_{ANT}=50\Omega \parallel 7.5nH$ RX terminating impedance: $Z_{RX}=50\Omega$ TX terminating impedance: $Z_{TX}=50\Omega$

Item		Minimum	Typical	Maximum	Unit
Center Frequency	f_c	-	902.5	-	MHz
Insertion Loss in 890.0 MHz–915.0MHz	IL	-	1.8	2.3	dB
Amplitude Variation in 890.0 MHz–915.0MHz			0.6	1.0	dB
Absolute Attenuation	α				
0.35 ... 840.5MHz		25	33	-	dB
840.5 ... 867.5 MHz		27	29	-	dB
938.0 ... 965.0 MHz		43	46	-	dB
1698.0 ... 1702.0MHz		36	43	-	dB
1778.0 ... 1832.0 MHz		35	39	--	dB
2667.0 ... 2745.0 MHz		23	26	--	dB
3556.0 ... 3664.0 MHz		10	18	--	dB
Input VSWR(TX port)					
in 890.0 MHz–915.0MHz		-	1.9:1	2.1:1	
Output VSWR(ANT port)					
in 890.0 MHz–915.0MHz		-	1.6:1	2.0:1	

 RoHS Compliant Electrostatic Sensitive Device