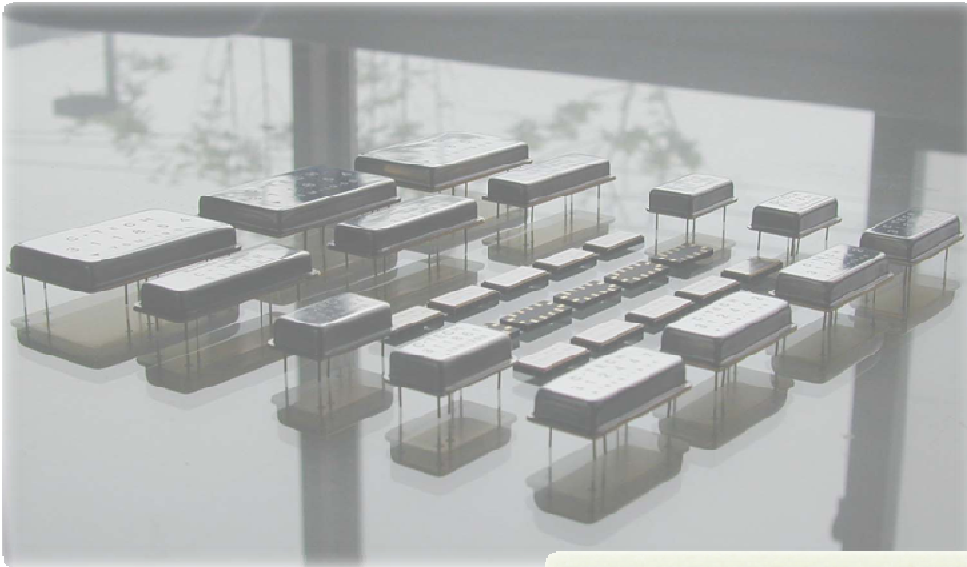


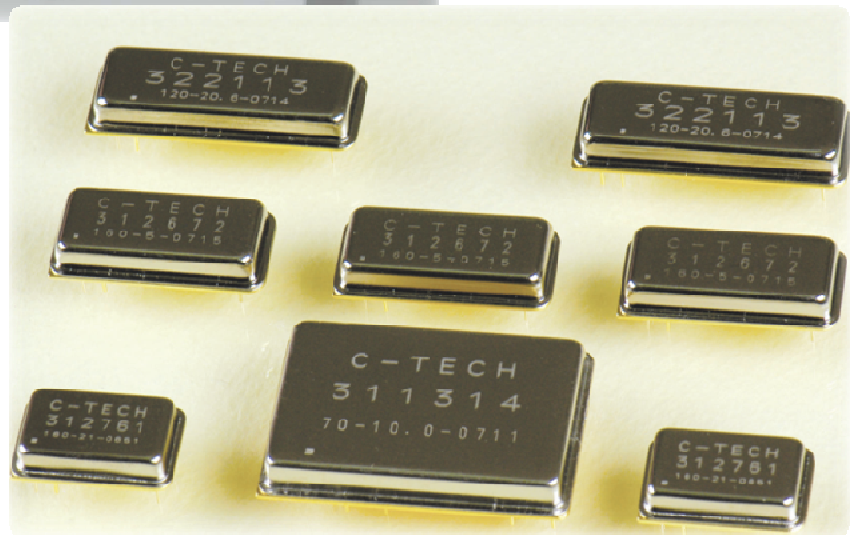
2009' E-Catalogue



Microwave

Bandpass

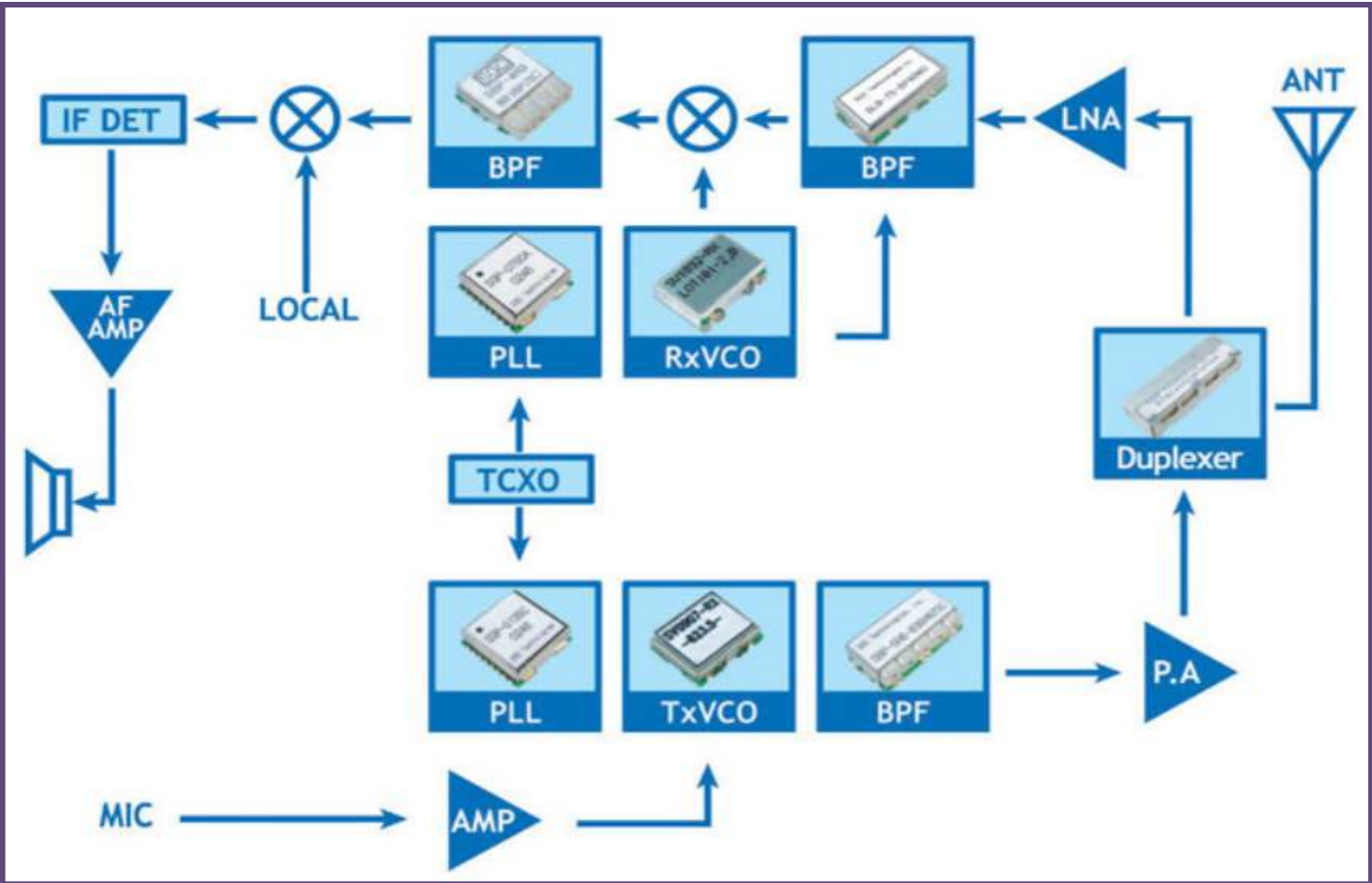
Filter



Microwave Components & Microwave Filters

Application Guide		Microwave Filters	Voltage Controlled Oscillators	Dielectric Resonators	L.C filters
Application	Products				
TRS		☺	☺	☺	
Mobile Telephone		☺	☺	☺	
GPS		☺	☺	☺	
PCS		☺	☺	☺	☺
WLL		☺	☺	☺	☺
FPLMTS		☺	☺	☺	☺
MMDS		☺	☺	☺	
Wireless LAN		☺	☺	☺	☺
VAST/HDTV					☺
VCR, TV, CATV					☺
Cordless Phones		☺	☺	☺	☺

<Communication System Block Diagram>



Microwave Duplexer : CTDMA Series

Mono Block : CTDMA 800Mhz			ITEM Code		CTDMA830A875BP10M		
			Application		GSM Repeater/CDMA Repeater		
Part Number	C.F (Mhz)	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CTDMA830A875BP10M	830.0	Fo ±5.0	2.5	1.0	1.5	50(870-880)	15.9/9.6/3.4
	875.0	Fo ±5.0	3.0	1.0	1.5	50 (825-835)	
CTDMA836A881BP25M	836.5	Fo ±12.5	3.0	1.6	1.8	40 (869-894)	
	881.5	Fo ±12.5	4.0	2.0	1.8	55 (824-849)	
CTDMA902A947BP25M	902.5	Fo ±12.5	3.0	1.6	1.8	40 (935-960)	
	947.5	Fo ±12.5	4.0	2.0	1.8	55 (890-915)	

Mono Block : CTDME 800Mhz			ITEM Code		CTDME836A881BP25M		
			Application		GSM Repeater/CDMA Repeater TRS Repeater		
Part Number	C.F (Mhz)	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CTME830A875BP10M	830.0	Fo ±5.0	2.0	1.0	1.4	60 (870-880)	40.0/14.0/3.2
	875.0	Fo ±5.0	2.0	1.0	1.4	60 (825-835)	
CTME836A881BP25M	836.5	Fo ±12.5	2.0	1.0	1.4	60 (869-894)	
	881.5	Fo ±12.5	2.0	1.0	1.4	60 (824-849)	
CTME902A947BP25M	902.5	Fo ±12.5	2.0	1.0	1.4	60 (935-960)	
	947.5	Fo ±12.5	2.0	1.0	1.4	60 (890-915)	
CTME858A813BP15M	813.5	Fo ± 7.5	2.0	1.0	1.4	60 (851-866)	
	858.5	Fo ± 7.5	2.0	1.0	1.4	60 (806-821)	

Mono Block : CTDMB 1700/2100Mhz			ITEM Code		CTDMB1970A2160BP20M		
			Application		Digital Broadcasting/K-PCS Repeater IMT-2000 Repeater		
Part Number	C.F (Mhz)	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CTDMB1970A2160BP20M	1970.0	Fo ±10.0	2.0	1.0	1.4	55 (2150-2170)	20.3/6.2
	2160.0	Fo ±10.0	2.0	1.0	1.4	55 (1960-1980)	
CTDMB1760A1850BP20M	1760.0	Fo ±10.0	2.0	1.0	1.4	60 (1840-1860)	
	1850.0	Fo ±10.0	2.0	1.0	1.4	60 (1750-1770)	
CTDMB2425A2470BP4M	2425.0	Fo ±2.0	3.0	1.0	1.4	45 (2468-2472)	
	2470.0	Fo ±2.0	3.0	1.0	1.4	45 (2423-2427)	

Mono Block : CTDMC 1700/2100Mhz			ITEM Code		CTDMC1760A1850BP20M		
			Application		K-PCS & IMT-2000 Repeater		
Part Number	C.F (Mhz)	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CTDMC1970A2160BP20M	1970.0	Fo ±10.0	2.5	1.0	1.5	65 (2150-2170)	27.2/7.0/4.1
	2160.0	Fo ±10.0	2.5	1.0	1.5	65 (1960-1980)	
CTDMC1950A2140BP20M	1950.0	Fo ±10.0	2.5	1.0	1.5	65 (2130-2150)	
	2140.0	Fo ±10.0	2.5	1.0	1.5	65 (1940-1960)	
CTDMC1760A1850BP20M	1760.0	Fo ±10.0	2.0	1.0	1.5	65 (1840-1860)	
	1850.0	Fo ±10.0	2.0	1.0	1.5	65 (1750-1770)	

Array Type : CTD PX 6R3 900/1900Mhz			ITEM Code		CTDPX-6R3-LP TYPE		
			Application		GSM & K-PCS Repeater		
Part Number	C.F (Mhz)	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CTDPX-902-6R3-947LP25M	902.5	Fo ±12.5	2.0	1.6	2.0	27 (935 - 960)	20.0/11.0/4.0
	947.5	Fo ±12.5	3.5	1.6	2.0	30 (890 - 915)	
CTDPX-1765-6R3-1855LP30M	1765.0	Fo ±15.0	2.0	1.5	2.0	40 (1840-1870)	
	1855.0	Fo ±15.0	3.0	0.5	2.0	55 (1750-1780)	
CTDPX-1880-6R3-1960LP60M	1880.0	Fo ±30.0	2.5	2.0	2.0	15 (1930-1990)	
	1960.0	Fo ±30.0	3.5	2.0	2.0	20 (1850-1910)	
CTDPX-1755-6R3-1845LP10M	1960.0	Fo ±5.0	2.0	0.5	2.0	40 (1840-1850)	
	1960.0	Fo ±5.0	3.0	0.5	2.0	50 (1750-1760)	

Array Type : CTD PX 6R6 800/1900Mhz			ITEM Code		CTDPX-6R6-BP TYPE		
			Application		GSM & K-PCS Repeater		
Part Number	C.F (Mhz)	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CTDPX-836-6R6-1136BP25M	836.5	Fo ±12.5	1.2	0.5	1.5	55 (1124-1149)	40.0/18.0
	1136.5	Fo ±12.5	1.2	0.5	1.5	55 (824 - 849)	
CTDPX-830-6R6-875BP10M	830.0	Fo ±5.0	2.5	1.0	1.4	50 (870 - 880)	
	875.0	Fo ±5.0	2.5	1.0	1.4	50 (825 - 835)	
CTDPX-836-6R6-881BP25M	836.5	Fo ±12.5	2.5	1.0	1.4	40 (869 - 894)	
	881.5	Fo ±12.5	2.5	1.0	1.4	40 (824 - 849)	
CTDPX-1650-6R6-1950PA60M	1650.0	Fo ±30.0	1.2	0.5	1.5	40 (1920-1980)	
	1950.0	Fo ±30.0	1.2	0.5	1.5	50 (1620-1680)	

Array Type : CTDPX 8R6 800/2100Mhz			ITEM Code		CTDPX-8R6-BP TYPE		
			Application		GSM / CDMA/ K-PCS Repeater TRS/ IMT-2000 Repeater		
Part Number	C.F (Mhz)	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CTDPX-813-8R6- 858BP15M	813.5	Fo ±7.5	3.0	0.5	1.4	55 (851 - 866)	54.0/20.0/7.5
	858.5	Fo ±7.5	3.0	0.5	1.4	55 (806 - 821)	
CTDPX-830-8R6- 875BP10M	830.0	Fo ±5.0	3.0	0.5	1.4	55 (880 - 890)	
	875.0	Fo ±5.0	3.0	0.5	1.4	55 (835 - 845)	
CTDPX-836-8R6- 881BP25M	836.5	Fo ±12.5	2.5	1.0	1.4	50 (869 - 894)	
	881.5	Fo ±12.5	2.5	1.0	1.4	50 (824 - 849)	
CTDPX-902-8R6- 947BP25M	902.5	Fo ±12.5	2.5	1.0	1.4	50 (935 - 960)	
	947.5	Fo ±12.5	2.5	1.0	1.4	50 (890 - 915)	
CTDPX-1775-8R6- 1865BP10M	1775.0	Fo ±5.0	2.0	0.5	1.4	55 (1860-1870)	
	1865.0	Fo ±5.0	2.0	0.5	1.4	60 (1770-1780)	
CTDPX-1760-8R6- 1850BP20M	1760.0	Fo ±10.0	2.0	0.5	1.4	50 (1840-1860)	
	1850.0	Fo ±10.0	2.0	0.5	1.4	55 (1750-1770)	
CTDPX-1765-8R6- 1855BP30M	1765.0	Fo ±15.0	2.0	0.5	1.4	45 (1840-1870)	
	1855.0	Fo ±15.0	2.0	0.5	1.4	50 (1750-1780)	

Array Type : CTDPX 6R6 800/1900Mhz			ITEM Code		CTDPX-6R6-BP TYPE		
			Application		GSM & K-PCS Repeater		
Part Number	C.F (Mhz)	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CTDPX-830-8R8- 875BP10M	830.0	Fo ±5.0	2.0	0.5	1.4	60 (870 - 880)	40.0/18.0
	875.0	Fo ±5.0	2.0	0.5	1.4	60 (825 - 835)	
CTDPX-836-8R8- 881BP25M	836.5	Fo ±12.5	2.0	1.0	1.4	50 (869 - 894)	
	881.5	Fo ±12.5	2.0	1.0	1.4	55 (824 - 849)	
CTDPX-902-8R8- 947BP25M	902.5	Fo ±12.5	2.0	1.0	1.4	50 (935 - 960)	
	947.5	Fo ±12.5	2.0	1.0	1.4	55 (890 - 915)	
SDPX-1765-8R8- 1855BP30M	1765.0	Fo ±15.0	2.0	1.0	1.4	55 (1840-1870)	
	1855.0	Fo ±15.0	2.0	1.0	1.4	55 (1750-1780)	

LC Filter : BPF, DPX, TPX

LC Filter : 30/600Mhz (BPF CLB Series)			ITEM Code		SLB-30/600Mhz		
			Application				
Part Number	C.F (Mhz)	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
SLB- 30-BP 10MD	30	Fo ±5	3.5	1.0	1.43	50 (Fo ±15)	25.0/12.5/8.75
SLB- 47-BP 27MD	47.5	Fo ±13.5	2.0	1.0	1.43	50 (Fo ±40)	
SLB-265-BP 5MD	265.5	Fo ±2.5	8.0	1.0	1.43	45 (Fo ±20)	
SLB-273-BP 4MD	273.0	Fo ±2.0	8.0	1.0	1.43	45 (@ 264)	
SLB-413-BP 27MD	413.0	Fo ±13.5	3.0	1.0	1.43	40 (Fo ±100)	
SLB-600-BP 300MD	600.0	Fo ±150.0	2.0	1.0	1.43	20 (Fo -100) 10(Fo +100)	

LC Filter : 50/400Mhz (BPF CLB Series)			ITEM Code		SLB-50/400Mhz		
			Application				
Part Number	C.F (Mhz)	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
SLB- 50-BP 30MB	50	Fo ±15	2.0	0.8	1.43	50 (Fo ±50)	A-Type : 16.0/11.0/6.0 B-Type : 23.0/12.0/6.5
SLB- 65-BP 10MB	65	Fo ±5.0	3.5	1.0	1.43	50 (Fo ±30)	
SLB- 70-BP 10MB	70	Fo ±5.0	3.5	1.0	1.43	50 (Fo ±30)	
SLB- 70-BP 30MB	70	Fo ±15	2.0	0.8	1.43	50 (Fo ±50)	
SLB- 80-BP 10MB	80	Fo ±5.0	3.5	1.0	1.43	50 (Fo ±30)	
SLB- 95-BP 20MB	95	Fo ±10.0	2.5	1.0	1.43	40(Fo±40)	
SLB-100-BP 10MB	100	Fo ±5.0	3.5	1.0	1.43	50(Fo±30)	
SLB-120-BP 5MA	120	Fo ±2.5	4.0	1.0	1.43	40(Fo±20)	
SLB-150-BP 10MB	150	Fo ±5.0	4.0	1.0	1.43	45(Fo±30)	
SLB-200-BP 200MB	200	Fo ±100.0	1.2	1.0	1.43	15(Fo±400)	
SLB-237-BP 25MB	237	Fo ±12.5	3.0	1.0	1.43	40(Fo±60)	
SLB-264-BP 4MB	264	Fo ±2.0	6.5	0.5	1.43	16(@ 273)	
SLB-328-BP 10MB	328.5	Fo ±5.0	3.5	1.0	1.43	40(Fo±50)	
SLB-400-BP 60MB	400	Fo ±30.0	2.5	1.0	1.43	30(Fo±120)	

LC Filter : 10/100Mhz (CLL & CLH Series)			ITEM Code		CLL-CLH LPF & HPF		
			Application				
Part Number	Cutoff Frequency	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CLL- 10-LPD	30		1.0	1.0 (@DC~10.7)	1.43 (@DC~10.7)	50 (@17)	A Type : 13.0/12.0/7.0
CLL- 27-LPD	47.5		1.0	1.0 (@DC ~27)	1.43 (@DC ~27)	50 (@38)	
CLL-100-LPD	265.5		1.5	1.5 (@50~100)	1.43 (@50~100)	55 (@130)	
CLL-180-LPD	273.0		1.5	1.5 (@120~180)	1.43 (@120~180)	40 (@214)	B Type : 25.0/14.0/8.75
CLH-100-HPB	413.0		1.5	1.5 (@100~200)	1.43 (@100~200)	55 (@70)	

LC Filter : 100Mhz Duplexer (CLD Series)			ITEM Code		CLD 70/400Mhz		
			Application				
Part Number	C.F (Mhz)	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CLD- 10BP-115BPE	10.7	Fo±0.5	2.0	1.0	1.43	70(@ 55)	1.18/1.18/ 0.335
	115.0	Fo±62.5	1.5	1.0	1.43	70(@ 10.7)	
CLD-70BP-140BP-10ME	70.0	Fo±0.5	2.0	1.0	1.43	60(@ 140)	
	140.0	Fo±0.5	2.0	1.0	1.43	60(@ 70)	
CLD- 90BP-160BPE	90.0	Fo±15	2.0	1.0	1.43	60(@ 160)	
	160.0	Fo±15	2.0	1.0	1.43	60(@ 90)	
CLD-105BP-160BPE	105.0	Fo±0.5	3.0	0.5	1.43	60(@ 160)	
	160.0	Fo±15	2.0	1.0	1.43	60(@ 105)	
CLD-140BP-300BPE	140.0	Fo±28	1.5	1.0	1.43	60(@ 272)	
	300.0	Fo±28	2.0	1.0	1.43	60(@ 168)	
CLD-140BP-400BPJ	140.0	Fo±50	1.5	0.5	1.43	60(@ 350)	
	400.0	Fo±50	2.0	0.5	1.43	60(@ 190)	

LC Filter : 70/140Mhz Duplexer (CLD Series)			ITEM Code		CLD Duplexer 70/140Mhz		
			Application				
Part Number	Cutoff Frequency	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CLD- 70LP-140HPE	70.0		1.5	1.0 (@40~70)	1.43 (@40~70)	60(@ 140)	47.0/15.0/6.25
	140.0		1.5	1.0 (@140~170)	1.43 (@140~170)	60(@ 70)	
CLD- 85LP-125HPE	85.0		1.5	1.0 (@55~85)	1.43 (@55~85)	60(@ 125)	
	125.0		1.5	1.0 (@125~155)	1.43 (@125~155)	60(@ 85)	
CLD-230LP-370HPE	230.0		1.5	1.0 (@170~230)	1.43 (@170~230)	60(@ 370)	
	370.0		1.5	1.0 (@370~430)	1.43 (@370~430)	60(@ 230)	

LC Filter : Duplexer LPF & BPF			ITEM Code		CLD Module		
			Application				
Part Number	C.F (Mhz)	B.W (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CLD-195BP-859BP	195.0	Fo±75	1.0	0.3	1.3	60(@824~894)	59.5/40.5/13.0
	859.0	Fo±35	1.2	0.1	1.3	65(@120~270)	
CLD-85LP-140BP-69M	85.0	55~85	2.0	0.2	1.5	50(@106)	60.9/29.0
	140.5	106~175	4.5(@ 106) 2.0(@160)	0.4	1.4	90(@85) 50(@258)	

LC Filter : Triplexer LPF & BPF			ITEM Code		CLT LPF & BPF TYPE (Triplexer)		
			Application				
Part Number	BAND	Cutoff (Mhz)	I.L (Max/dB)	Ripple (Max/dB)	VSWR (Max/dB)	Attenuation (Min/dB)	PKG : mm (W-L-H)
CLT-85LP-113BP -160BPF	LOW	85.0	1.5	1.0 (@55~85)	1.43 (@55~85)	60(@150)	55.0/18.0/7.5
	BAND	113(C.W)	4.0	-	1.43	60(@70)	
	BAND	160(30M)	3.0	1.0	1.43		
CLT-103BP-165BP -325BP-10MI	BAND	103(10M)	3.0	0.5	1.43	60(@165)	60.0/19.0/7.0
	BAND	165(10M)	3.0	0.5	1.43	60(@103) 50(@325)	
	BAND	325(10M)	3.0	0.5	1.43	60(@165)	

CAVITY : BPF & DPX

1. CT-D2160-20NS-KSR (96.0 * 99.0 * 34.0)

CAVITY Duplexer (Forumts Repeater)			Part Number		CT-D2160-20NS-KSR		
			Application		Picocell Basestaion Handset or Equipment Test		
Frequency Range	Insertion Loss (Max)	Attenuation (Min)	Return Loss (Min)	Passband Ripple(Max)	Relative Humidity	Isolation (Min)	Impe-dance
RX : 1960 ~ 1980Mhz	-2.3dB	FC±13.5	-18dB	1.0 dB	0~95%	-90dB	50 Ω
TX : 2150 ~ 2170Mhz		-10dBc					
Input Power Range	2W		Monitor Port	-30dB			
Operating Temperature	-30°C ~ + 60°C						

2. CT-D2140-60SS-HUR (78.0 * 44.0 * 26.0)

CAVITY Duplexer (Forumts Repeater/Full Band)			Part Number		CT-D2140-60SS-HUR		
			Application		Microcell Base Station Handset or Equipment Test		
Frequency Range	Insertion Loss (Max)	Attenuation	Return Loss (Min)	Passband Ripple(Max)	Relative Humidity	Isolation (Min)	Impe-dance
RX : 1920 ~ 1980Mhz	-1.0dB	-	-18dB	0.7dB	0~95%	-70dB	50 Ω
TX : 2110 ~ 2170Mhz							
Input Power Range	5W(CW)		Monitor Port	-			
Operating Temperature	-30°C ~ + 60°C						

3. CT-D2160-18.84NS-GRR (363.5 * 105.0 * 50.0)

CAVITY Duplexer (Forumts Repeater/Full Band)			Part Number		CT-D2160-18.84NS-GRR		
			Application		Picocell Basestaion Handset or Equipment Test		
Frequency Range	Insertion Loss (Max)	Attenuation	Return Loss (Min)	Passband Ripple(Max)	Relative Humidity	Isolation (Min)	Impe-dance
RX : 1960.48~1979.32	-1.3dB	-	-20dB	0.7dB	0~95%	-110dB	50 Ω
TX : 2150.48~2169.32							
Atteuation (Min)	FC ±12.5 ~ 20Mhz		FC ±20Mhz		FC ±30Mhz		2300~2400Mhz
	-30dBc		-40dBc		-60dBc		-90dBc
Input Power Range	100W			TX-Monitor Port	-30±1.0dB		
Operating Temperature	-20°C ~ +75°C						

4. CT-D2450-20NS-A1 (124.0 * 52.0 * 31.0)

CAVITY Duplexer (IEEE Repeater : WLAN)			Part Number		CT-D2450-20NS-A1		
			Application		Wireless LAN		
Frequency Range	Insertion Loss (Max)	Attenuation	Return Loss (Min)	Passband Ripple(Max)	Relative Humidity	Isolation (Min)	Impe-dance
RX : 2400 ~ 242Mhz	-1.4dB	-	-18dB	0.6dB	0~95%	-110dB	50 Ω
TX : 2440 ~ 2460Mhz							
Input Power Range	1W(CW)			Monitor Port	-		
Operating Temperature	-30°C ~ +60°C						

5. CT-D2150-40NN-BRR (235.0 * 170.0 * 42.0)

CAVITY Duplexer (3G Repeater : Subway)			Part Number		CT-D2150-40NN-BRR		
			Application		3G Repeater(Subway) Handset or Equipment TEST		
Frequency Range	Insertion Loss (Max)	Attenuation (Min)	Return Loss (Min)	Passband Ripple(Max)	Relative Humidity	Isolation (Min)	Impe-dance
RX : 2130~2170Mhz	-0.5dB	45dBc (@1907.4)	-20dB	0.3dB	0~95%	-100dB	50 Ω
TX : 1940~1980Mhz		50dBc (@2202.6)					
Input Power Range	80W		Monitor	30dB/-1.1dB			
Operating Temperature	-20°C ~ + 75°C						

6. CT-B1970-20SS-JRR (162.0 * 156.0 * 34.0)

CAVITY Duplexer (Forumts Repeater)			Part Number		CT-B1970-20SS-JRR		
			Application		General Purpose 3G TEST		
Frequency Range	Insertion Loss (Max)	Attenuation (Min)	Return Loss (Min)	Passband Ripple(Max)	Relative Humidity	Isolation (Min)	Impe-dance
1960 ~ 1980Mhz	-1.8dB	-30dB (edge±5Mhz)	-18dB	0.8dB	0~95%	-	50 Ω
Input Power Range	50W(CW)		Monitor	-			
Operating Temperature	-30°C ~ + 60°C						

7. CT-B1970-20SS-HQR (167.0 * 104.0 * 50.0)

CAVITY Duplexer (Forurmts Repeater)			Part Number		CT-B1970-20SS-HQR		
			Application		General Purpose 3G TEST		
Frequency Range	Insertion Loss (Max)	Attenuation (Min)	Return Loss (Min)	Passband Ripple(Max)	Relative Humidity	Isolation (Min)	Impe- dance
1960 ~ 1980Mhz	-1.5dB	-50dB (edge±5Mhz)	-18dB	0.8dB	0~95%	-110dB	50 Ω
		-25dB (edge±3Mhz)					
Input Power Range	60W(CW)		Monitor		-		
Operating Temperature	-30°C ~ + 60°C						