

CERAMIC MICROWAVE FILTERS BAND PASS-DP TYPE

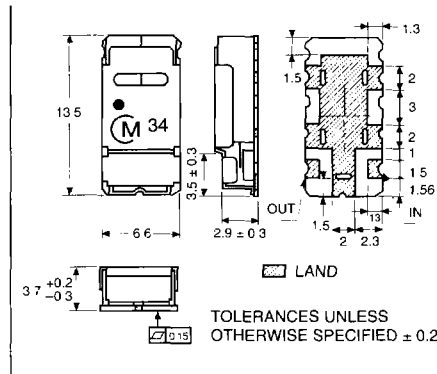


DFC Series

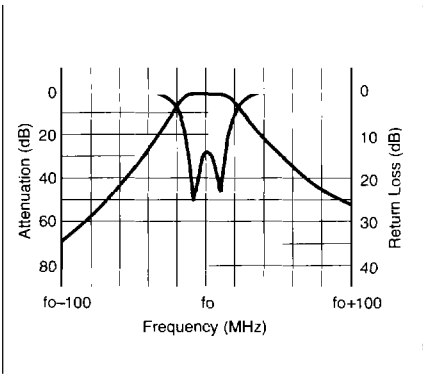
BAND PASS FILTER SMD – 2-POLE – LOW COST



DIMENSIONS: mm



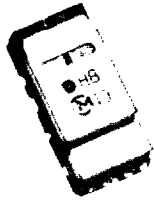
TRANSMISSION vs. REFLECTION CHARACTERISTICS



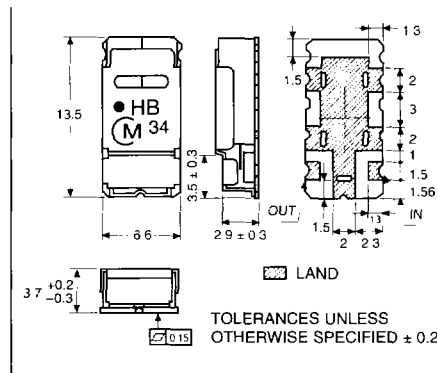
SPECIFICATIONS GSM

Part Number	Center Frequency fo (MHz)	Bandwidth (MHz)	Insertion Loss in BW (dB) max.	Ripple in BW (dB) max.	V.S.W.R. in BW max.	Attenuation (dB) min. (MHz)
DFC2R902P025BHD	902.5	fo ± 12.5	2.2	0.8	2.0	5 (fo ± 32.5)
DFC2R947P025BHD	947.5	fo ± 12.5	2.2	0.8	2.0	5 (fo ± 32.5)

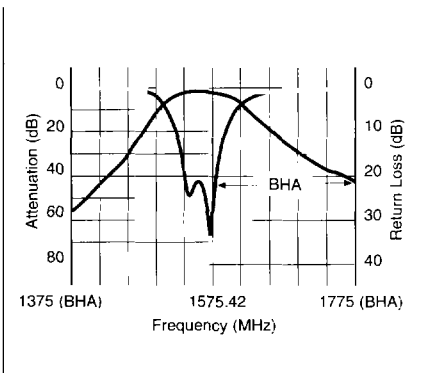
SMD – 2-POLE – LOW COST



DIMENSIONS: mm



TRANSMISSION vs. REFLECTION CHARACTERISTICS



SPECIFICATIONS GPS

Part Number	Center Frequency fo (MHz)	Bandwidth (MHz)	Insertion Loss in BW (dB)	Ripple in BW (dB)	V.S.W.R. in BW	Attenuation (dB) (MHz)
DFC21R57P002BHA	1575.42	fo ± 1.0	0.8 (+25°C) 0.9 (-30 ~ +85°C)	0.3	2.0	16 (fo - 140) 14 (fo + 140)

CERAMIC MICROWAVE FILTERS

CERAMIC MICROWAVE FILTERS BAND PASS FILTERS—DP TYPE

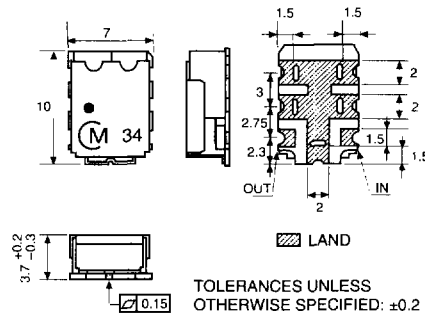


DFC Series

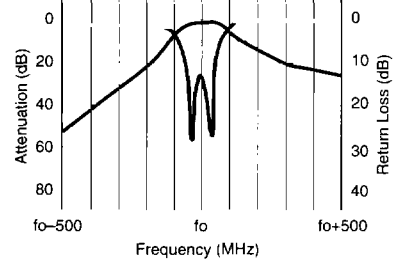
SMD – 2-POLE – LOW COST



DIMENSIONS: mm



TRANSMISSION vs. REFLECTION CHARACTERISTICS



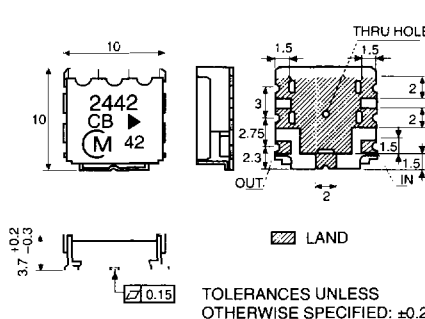
SPECIFICATIONS ISM 2.4 (SST)

Part Number	Center Frequency fo (MHz)	Bandwidth (MHz)	Insertion Loss in BW (dB)	Ripple in BW (dB)	V.S.W.R. in BW max.	Attenuation (dB) (MHz)
DFC22R44P084BHD	2442.0	fo ± 42.0	1.0 (+25°C) 1.2 (-35 ~ +85°C)	0.5	2.0	15 (fo ± 250)

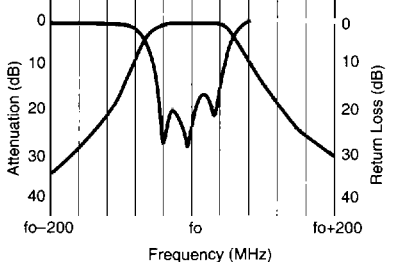
BAND PASS FILTERS SMD – 3-POLE – LOW COST



DIMENSIONS: mm



TRANSMISSION vs. REFLECTION CHARACTERISTICS



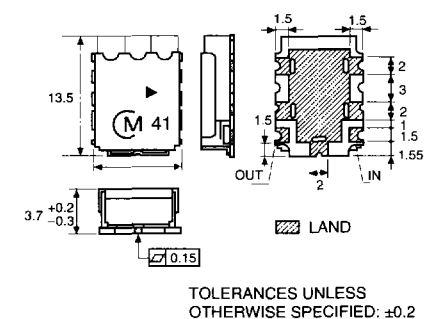
SPECIFICATIONS ISM 2.4 (SST)

Part Number	Center Frequency fo (MHz)	Bandwidth (MHz)	Insertion Loss in BW (dB)	Ripple in BW (dB)	V.S.W.R. in BW max.	Attenuation (dB) (MHz)
DFC32R44P084BHD	2442.0	fo ± 42.0	2.0 (0 ~ +85°C) 2.4 (-30 ~ 85°C)	1.0	2.0	6 (fo ± 80)

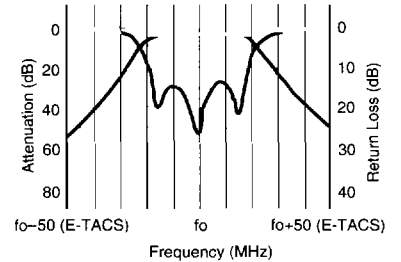
BAND PASS FILTERS SMD – 3-POLE – LOW COST



DIMENSIONS: mm



TRANSMISSION vs. REFLECTION CHARACTERISTICS



SPECIFICATIONS E-TACS

Part Number	Center Frequency fo (MHz)	Bandwidth (MHz)	Insertion Loss in BW (dB)	Ripple in BW (dB)	V.S.W.R. in BW max.	Attenuation (dB) (MHz)
DFC3R888P033BHD	888.5	fo ± 16.5	3.0	1.3	2.0	7 (fo ± 28.5)
DFC3R933P033BHD	933.5	fo ± 16.5	3.0	1.3	2.0	7 (fo ± 28.5)

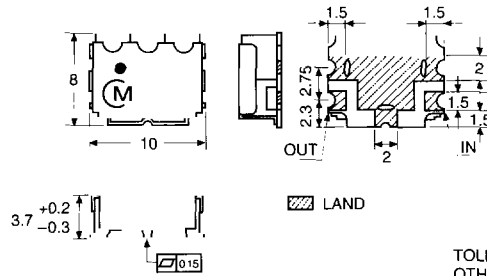
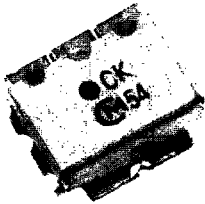
CERAMIC MICROWAVE FILTERS BAND PASS FILTERS-DP TYPE



DFC Series

SMD - 3-POLE - LOW COST

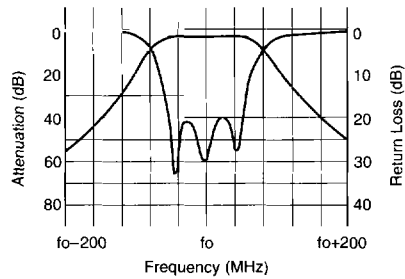
DIMENSIONS: mm



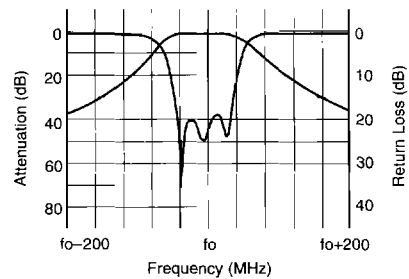
TOLERANCES UNLESS OTHERWISE SPECIFIED: ± 0.2

TRANSMISSION vs. REFLECTION CHARACTERISTICS

PCN



PCS



CERAMIC MICROWAVE FILTERS

SPECIFICATIONS PCN/PCS

Type	Part Number	Center Frequency f_0 (MHz)	Bandwidth (MHz)	Insertion Loss in BW (dB)	Ripple in BW (dB)	V.S.W.R. in BW	Attenuation (dB) (MHz)
PCN	DFC31R74P075BHD	1747.5	$f_0 \pm 37.5$	2.0	1.0	2.0	8 ($f_0 \pm 80$) 25 ($f_0 \pm 160$)
	DFC31R84P075BHD	1842.5	$f_0 \pm 37.5$	2.0	0.8	2.0	8 ($f_0 \pm 80$) 25 ($f_0 \pm 160$)
PCS	DFC31R88P060BHD	1880	$f_0 \pm 30$	2.2	0.8	1.8	15 ($f_0 \pm 100$)
	DFC31R96P060BHD	1960	$f_0 \pm 30$	2.2	0.8	1.8	48 ($f_0 \pm 400$)

Application

DECT

LMR

EGSM

2-Pole

DFC21R89P020BHD

3-Pole

DFC3R815P020BHD

DFC3R860P020BHD

DFC3R897P035BHD

DFC3R942P035BHD

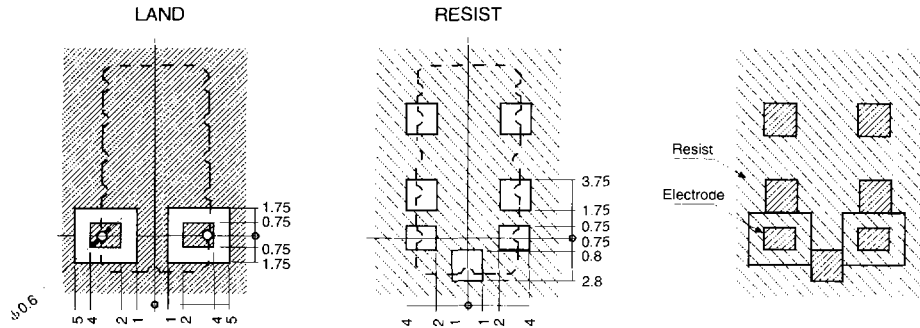
CERAMIC MICROWAVE FILTERS STANDARD LAND PATTERNS—BAND PASS FILTERS



DFC Series

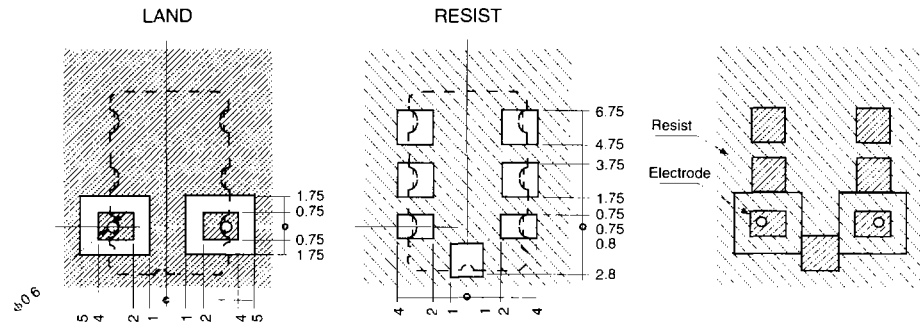
2-POLE

GPS
DFC21R57P002BHA



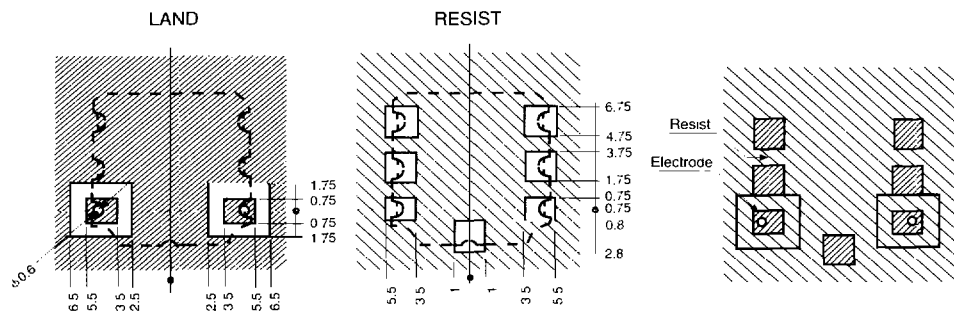
2-POLE

ISM 2.4
DFC22R44P084BHD



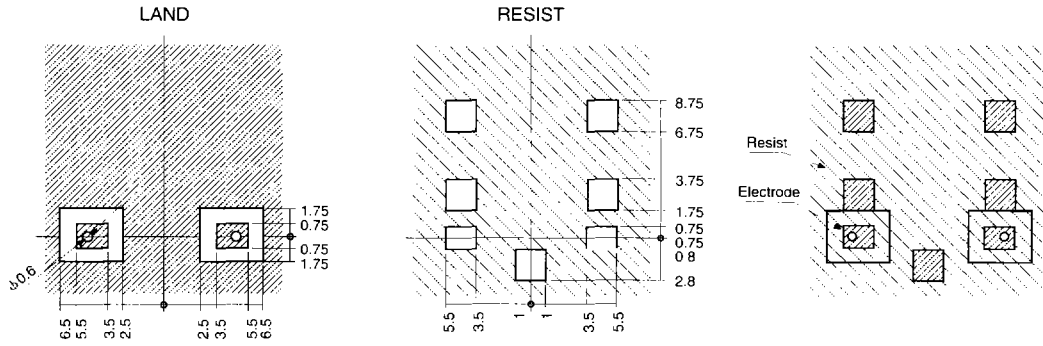
3-POLE

ISM 2.4
DFC32R44P084BHD



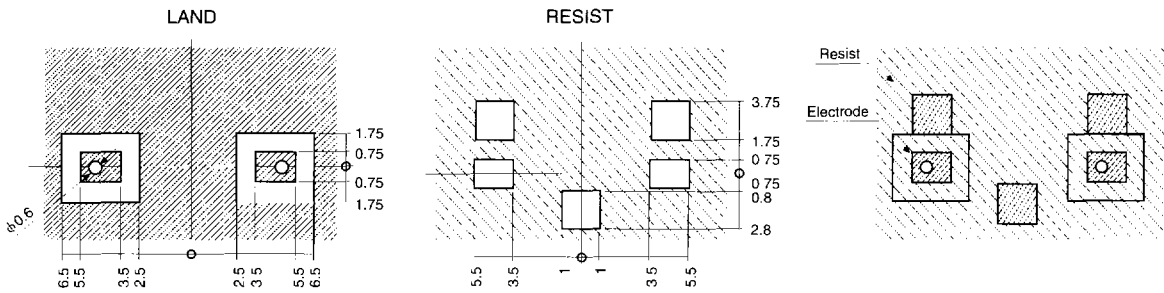
3-POLE

E-TACS/E GSM – 3-POLE
DFC3R897P035BHD
DFC3R942P035BHD



3-POLE

PCN/PCS
DFC31R74P075BHD
DFC31R84P075BHD
DFC31R88P060BHD
DFC31R96P060BHD



CERAMIC MICROWAVE FILTERS

CERAMIC MICROWAVE FILTERS BAND PASS FILTERS—MB TYPE

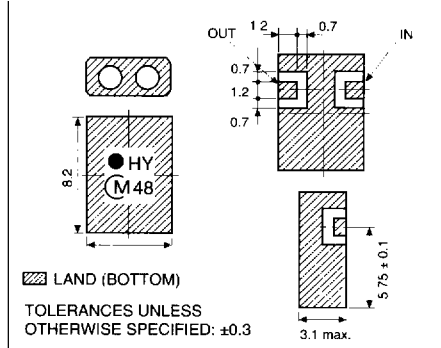


DFC Series

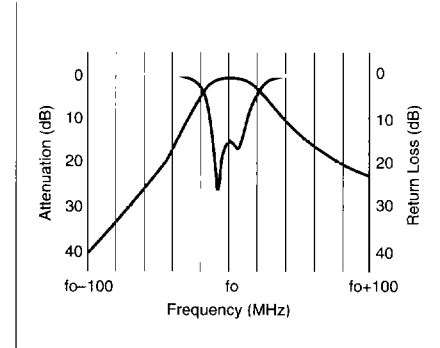
SMD – 2-POLE – LOW COST



DIMENSIONS: mm



TRANSMISSION vs. REFLECTION CHARACTERISTICS



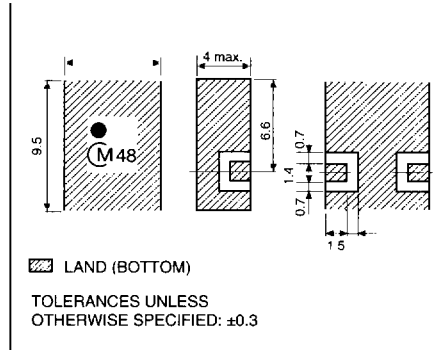
SPECIFICATIONS E-AMPS/ISM

Part Number	Center Frequency fo (MHz)	Bandwidth (MHz)	Insertion Loss in BW (dB)	Ripple in BW (dB)	V.S.W.R. in BW	Attenuation (dB) (MHz)
DFC2R836P025HHD	836.5	$fo \pm 12.5$	2.4	1.0	2.0	5 ($fo \pm 32.5$)
DFC2R881P025HHD	881.5	$fo \pm 12.5$	2.4	1.0	2.0	6 ($fo \pm 32.5$)
DFC2R915P026HHE	915.0	$fo \pm 13$	1.5	1.0	2.0	17 (992.5)

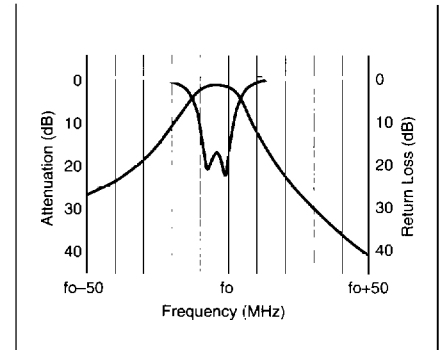
SMD – 2-POLE – LOW COST



DIMENSIONS: mm



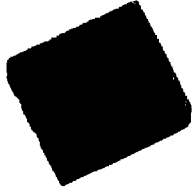
TRANSMISSION vs. REFLECTION CHARACTERISTICS



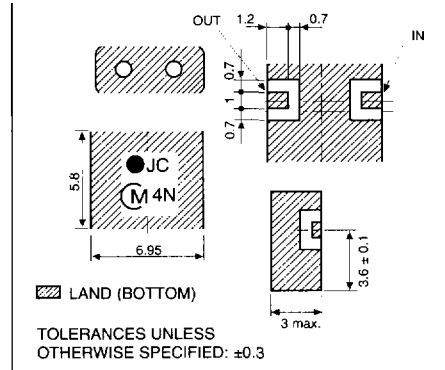
SPECIFICATIONS ISM (SST)

Part Number	Center Frequency fo (MHz)	Bandwidth (MHz)	Insertion Loss in BW (dB)	Ripple in BW (dB)	V.S.W.R. in BW	Attenuation (dB) (MHz)
DFC2R903P002HHA	903.0	$fo \pm 1$	3.0	0.5	2.0	20 ($fo \pm 22$)
DFC2R927P002HHA	927.0	$fo \pm 1$	3.0	0.5	2.0	15 ($fo \pm 22$)

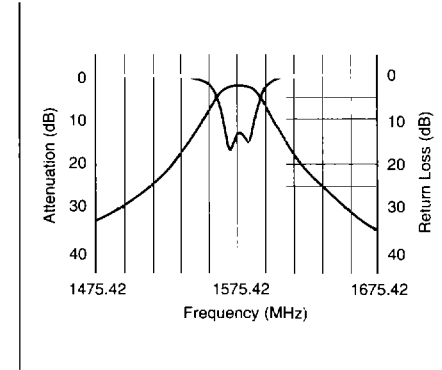
SMD – 2-POLE – LOW COST



DIMENSIONS: mm



TRANSMISSION vs. REFLECTION CHARACTERISTICS



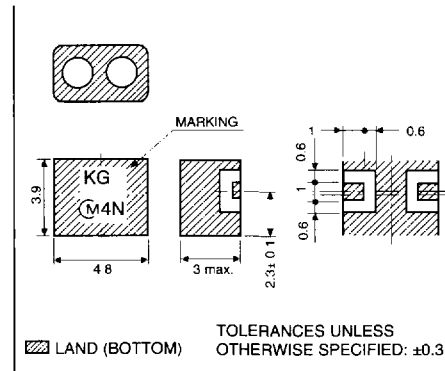
SPECIFICATIONS GPS

Part Number	Center Frequency fo (MHz)	Bandwidth (MHz)	Insertion Loss in BW (dB) max.	Ripple in BW (dB) max.	V.S.W.R. in BW max.	Attenuation (dB) (MHz)
DFC21R57P002HHA	1575.42	fo ± 1	2.9 (0 ~ 35°C) 3.15 (-35 ~ 85°C)	0.5	2.0	18 (fo ± 50)

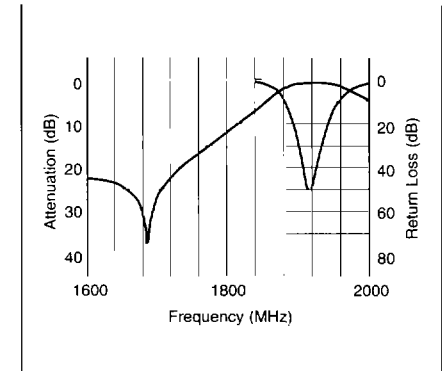
SMD – 2-POLE – LOW COST



DIMENSIONS: mm



TRANSMISSION vs. REFLECTION CHARACTERISTICS



SPECIFICATIONS PCN UNLICENSED

Part Number	Center Frequency fo (MHz)	Bandwidth (MHz)	Insertion Loss in BW (dB) max.	Ripple in BW (dB) max.	V.S.W.R. in BW max.	Attenuation (dB) min. (MHz)
DFC21R92P020HHD	1920	fo ± 10	1.9	0.5	2.0	37 (1690 – 1710)

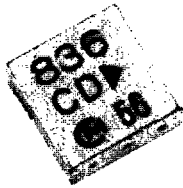
CERAMIC MICROWAVE FILTERS

CERAMIC MICROWAVE FILTERS BAND PASS FILTERS—MB TYPE

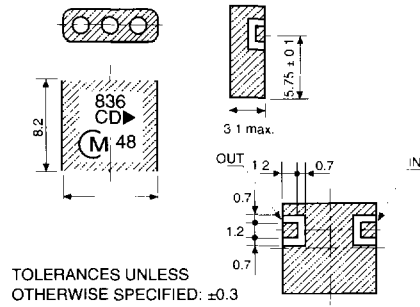


DFC Series

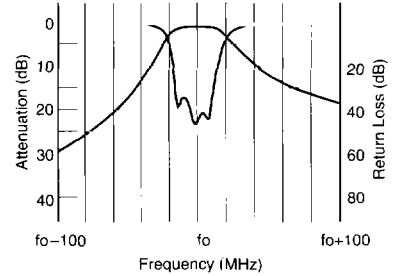
SMD – 3-POLE – LOW COST



DIMENSIONS: mm (E-AMPS)



TRANSMISSION vs. REFLECTION CHARACTERISTICS



SPECIFICATIONS E-AMPS/ISM (SST)

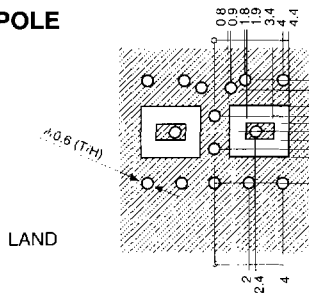
Part Number	Center Frequency f_0 (MHz)	Bandwidth (MHz)	Insertion Loss in BW (dB)	Ripple in BW (dB)	V.S.W.R. in BW	Attenuation (dB) (MHz)
DFC3R836P025HHD	836.5	$f_0 \pm 12.5$	3.0	1.0	2.0	12dB (864 ~ 894)
DFC3R881P025HHD	881.5					15dB (824 ~ 849)
DFC3R915P026HHC	915.0	$f_0 \pm 13$	3.0			12dB (80 + 32.5) 15dB (80 - 32.5)

ALSO AVAILABLE:

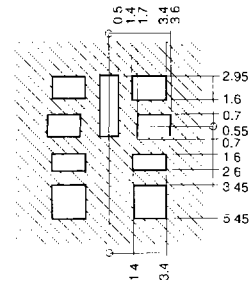
Application	Part Number 2-Pole	Application	Part Number 3-Pole
CT1	DFC2R914P001HHA	GSM	DFC3R902P025HHB
	DFC2R959P001HHA		DFC3R947P025HHB
	DFC2R866P002HHA		DFC3R914P001HHA
	DFC2R931P002HHA		DFC3R959P001HHA
	DFC2R820P020HHA		DFC3R886P002HHA
PDC	DFC21R48P024HHA	Cordless Phone	DFC3R931P002HHA
	DFC21R89P020HHE		DFC31R74P075HHA
DECT	DFC2R902P025HHB	PCN	DFC31R84P075HHA
GSM	DFC2R947P025HHB		PCS
	DFC21R90P025HHC	DFC31R96P060HHA	
PHS	DFC21R90P025HHD		
	DFC21R90P025HHE		

MB TYPE/E-AMPS 2-POLE

E-AMPS/ISM915 – 2-POLE
DFC2R881P025HHD

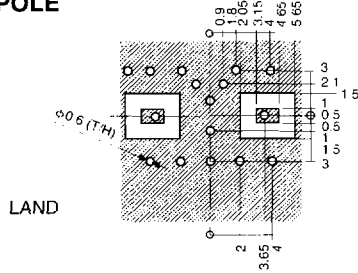


RESIST

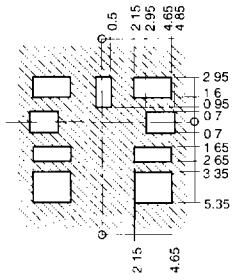


MB TYPE/E-AMPS 3-POLE

E-AMPS/ISM915 – 3-POLE
DFC3R881P025HHD

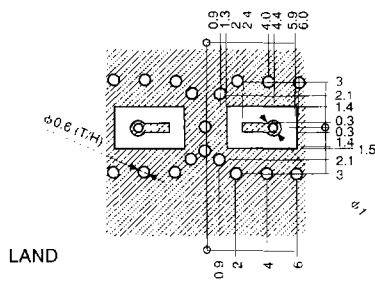


RESIST

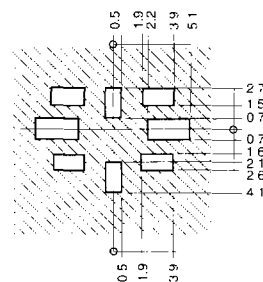


MB TYPE/GPS

GPS – 2-POLE
DFC21R57P002HHA

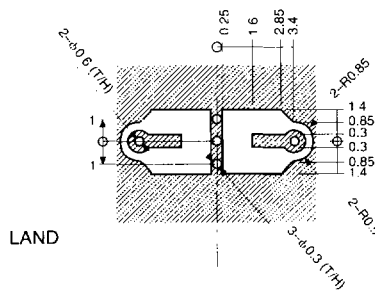


RESIST

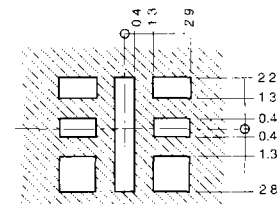


MB TYPE/PCS

PCS – 2-POLE
DFC21R92P020HHD

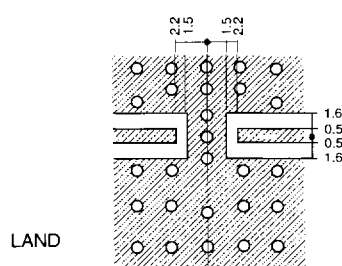


RESIST

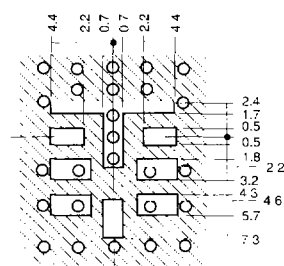


MB TYPE/ISM 2-POLE

ISM903/927 – 2-POLE
DFC2R903P002HHA



RESIST



CERAMIC MICROWAVE FILTERS

Note: Impedance of both input and output lines should be 50ohms including land pattern. The standard condition is applying glass epoxy board (dielectric constant = 4.8, copper metalized on both surfaces) and the input and output lines are connected to 50ohms microstrip lines on the back side surface through the via hole.