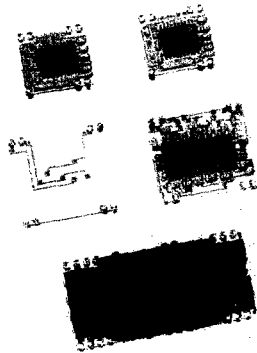


OTHER PRODUCTS HIGH FREQUENCY ACTIVE FILTER



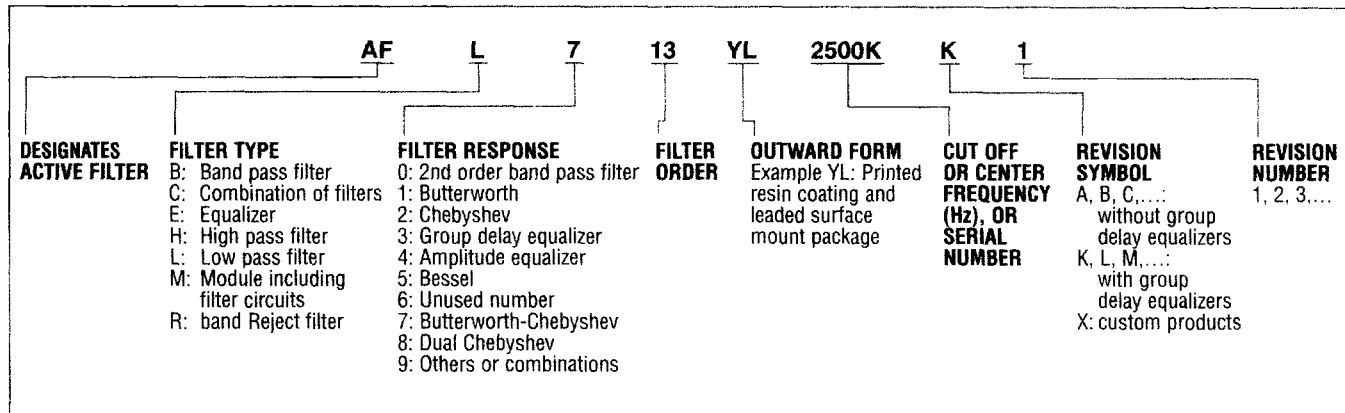
FEATURES

- Wide filtering frequency range available (up to 30MHz)
- High precision: (examples)
 - 1) 0.3dB typical pass band ripple for AFL78YL615KK1
 - 2) $\pm 3^\circ$ typical phase deviation for AFE32YL315KA1
 - 3) 5nsec. typical GDT deviation for AF-9119 (5MHz LPF)
- Excellent IM suppression: (ex.) +26dBm IP3 for AFL78YL615KK1
- No insertion loss
- Low current consumption: (ex.) 5mA max. for AFL713YL5MK1
- Small size and surface mountable
- Added functions easily integrated (e.g.: built-in 75 Ω load drivers, gain adjustment with external resistor values, multiple filter channels)

APPLICATIONS

- Wireless communication: CDMA/PCS, W-CDMA base station cdmaone (IS-95A), wide band cdmaone, etc., WLL
- Wired communication: xDSL, modem, cable modem
- Audio/Visual Equipment: DTV, MPEG2 video processor, HDTV

PART NUMBERING SYSTEM



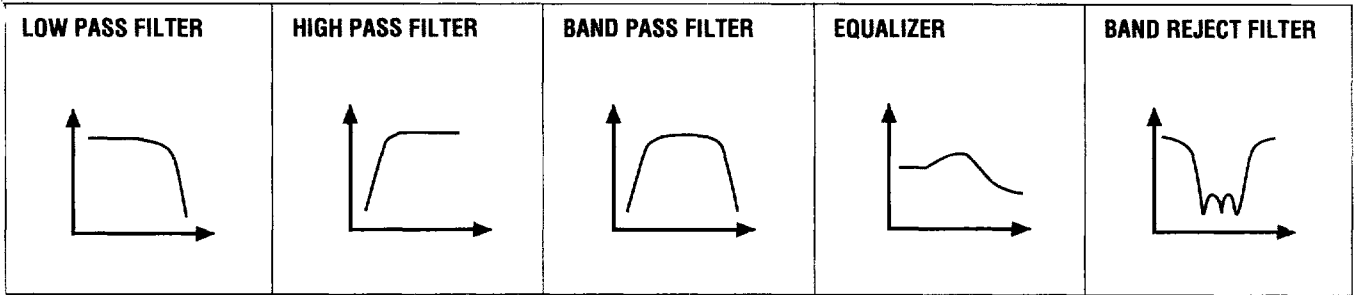
SPECIFICATIONS

Part Number	Filter Function (& Bandwidth)	Cutoff or Center Frequency	Output Level	Number Channels	Supply Voltage & Icc	Stopband Rejection (dB)	Passband Ripple (dB)	GDT Dev. or Phase Dev.	Input/Output Impedance
AFL78YL615KK1*	Low Pass for transmitter and receiver baseband (1.228MHz)	615kHz	0dB	1	$\pm 5V$ 3.7mA (typ.)	>20dB @ 900kHz ~ 2.5MHz	<0.8dB @ 1kHz ~ 615kHz	Phase Distortion <5 mrad ² @ 1kHz ~ 615kHz	High input imp./ Low output imp.
AFL713YL2500KK1*	Low Pass for transmitter and receiver baseband (5MHz)	2.5MHz	0dB	1	$\pm 5V$ 3.7mA (typ.)	>43dB @ 3.75MHz ~ 5MHz	<1.5dB @ 100kHz ~ 1.96MHz	<60nsec @ 100kHz ~ 1.96MHz	High input imp./ Low output imp.
AFL713YL5MK1*	Low Pass for transmitter and receiver baseband (10MHz)	5MHz	0dB	1	$\pm 5V$ 3.7mA (typ.)	>37dB @ 7MHz ~ 10MHz	<1.2dB @ 100kHz ~ 2.5MHz <2dB @ 100kHz ~ 4.3MHz	<60nsec @ 100kHz ~ 4.3MHz	High input imp./ Low output imp.
AFE32YL315KA1*	Delay Equalizer for transmitter baseband (1.228MHz)	315kHz	0dB	1	$\pm 5V$ 3.7mA (typ.)	NA	<0.5dB @ 1kHz ~ 615kHz	< ± 4 deg.	High input imp./ Low output imp.
AFM79YL20M1**	Low Pass with output Amp.	20MHz	-6.5dB	3	+9V 70mA (max.)	>15dB @ 22.275MHz	-0.8dB ~ 1.2dB @ 12MHz -2.3dB ~ 0.7dB @ 16MHz normalized at 100kHz	4nsec ~ 20nsec @ 1MHz 32nsec ~ 49nsec @ 15MHz	High input imp./ Approx. 6 ohms for output imp.

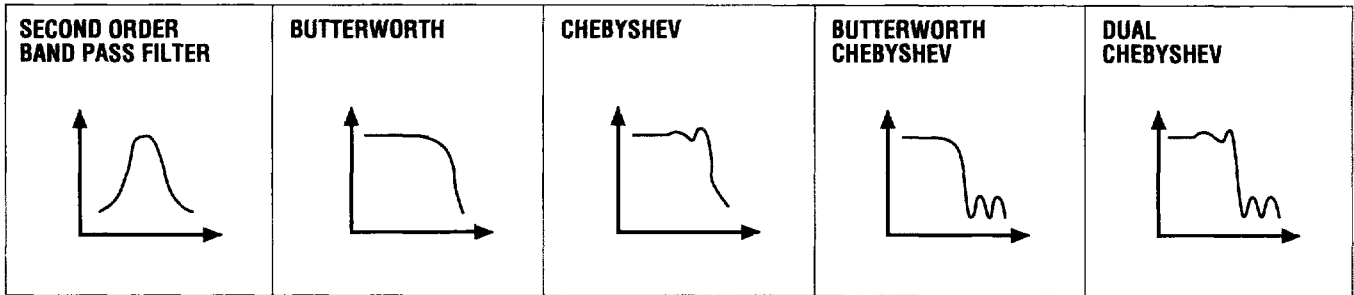
*Typical dimensions LxWxH mm: 13.1x12.7x4.5

**Typical dimensions LxWxH mm: 18.1x16.3x4.5

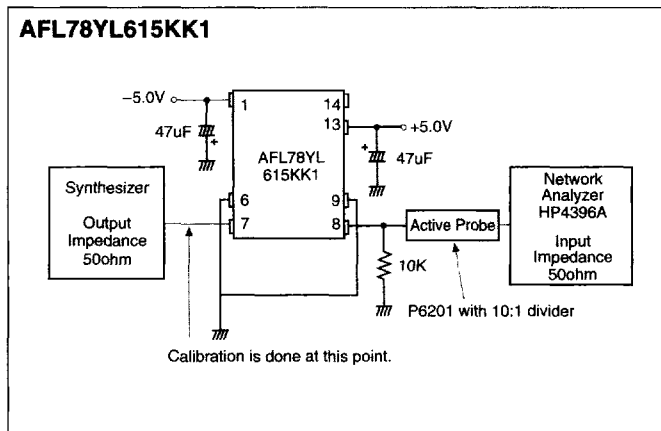
TYPICAL FILTER TYPES



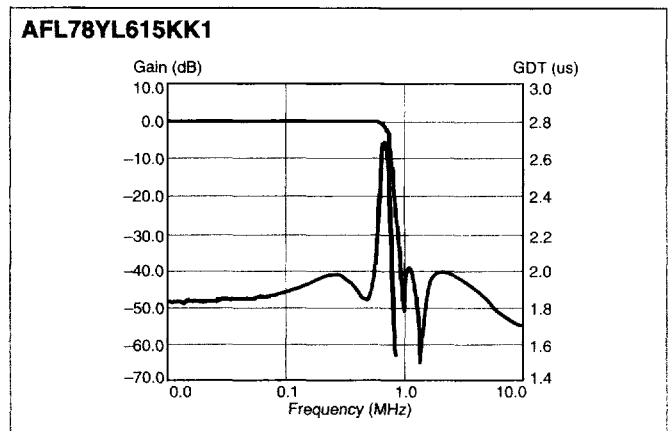
TYPICAL FILTER RESPONSES



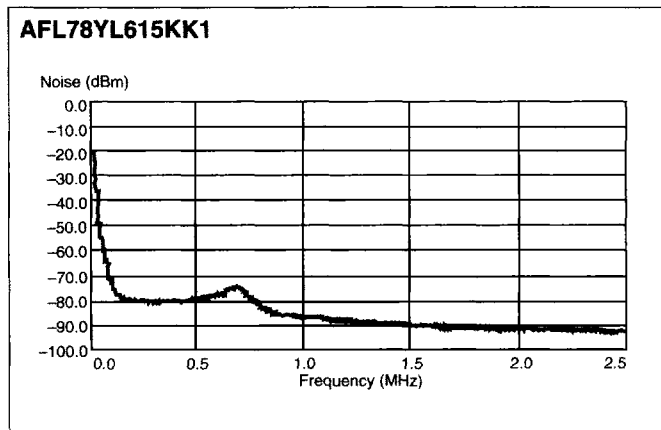
TYPICAL TEST CIRCUIT



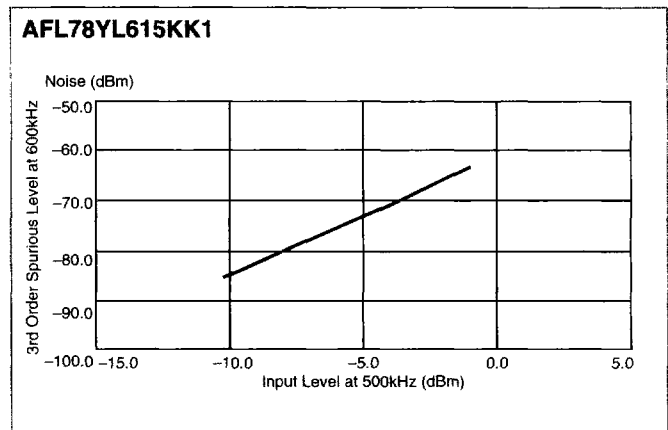
TYPICAL GAIN & GROUP DELAY CHARACTERISTICS



TYPICAL NOISE CHARACTERISTICS



TYPICAL IM CHARACTERISTICS

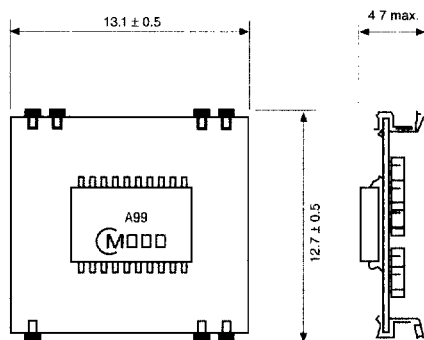


OTHER PRODUCTS HIGH FREQUENCY ACTIVE FILTER DIMENSIONS

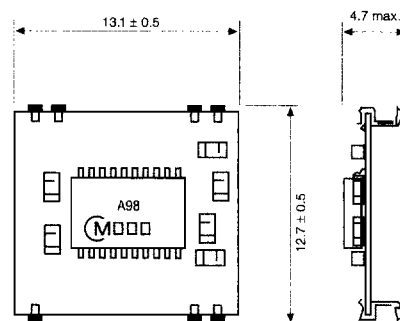
MECHANICAL DRAWING—HF-AF

DIMENSIONS: mm

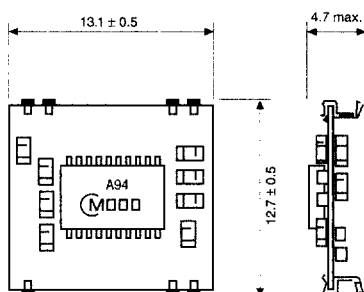
AFL78YL615KK1



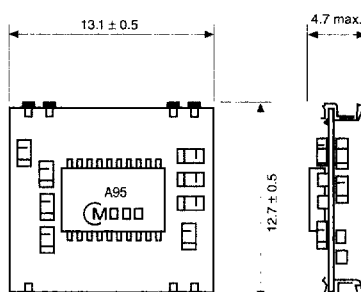
AFE32YL315KA1



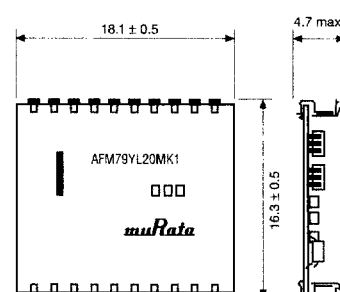
AFL713YL2500KK1



AFL713YL5MK1

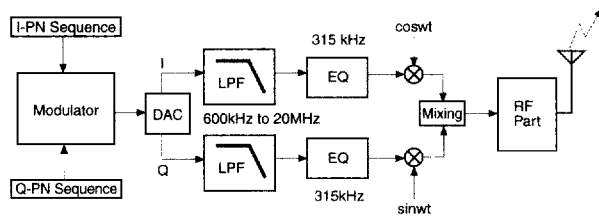


AFM79YL20MK1



CDMA BASE STATION APPLICATION OF LOW PASS FILTER & EQUALIZER

Transmitter Side



Receiver Side

