

**** INDEX ****

Bessel response See Normalized reference
Block diagram of PCFILT 1-19
Branch numbers
 circuit editor 21-2
 LPBP forced shunt 6-3
 network optimization 22-1
 power analysis (shunt br) ... 17-1
Coaxial resonators 14-4, 14-8, Appendix D
Common bandpass filters 1-15
Configuration 1-2
Coupled Triplet Appendix D
Coupling coefficients (Bw) 4-2
Design types
 selecting new type 1-4
 common bandpass types 1-15
 mesh 7-1
 node (tank) 7-1, 7-2
 LPBP (direct scaled) 6-1, 1-12
 Norton transformed 6-3
 minimum component 6-9
 forced value shunt ... 6-6
 Elliptic function 1-5, 3-1
 Stray capacity Cp 21-9, 8-1
 conventional 1-16
 narrow bandwidth 8-1
 Zig-Zag 1-17, 8-3, 8-5
 Tubular
 Coaxial 1-17, 7-11
 lumped component 7-9, 7-10, 11-6
 special bandpass types
 transmission zeros 6-1
 determining frequency ...
 of normalized ref. 2-5
 conventional mask 3-5, 10-2
 5 resonator elliptic 8-1
 symmetrical (scaled) 7-7
 single ("Z" coupling) ... 7-8
 fully pole placed 3-5, 10-6
 microstrip See Microstrip filters
 Blinchikoff 8-1
 Lowpass
 Reference 1-5
 Tubular (coaxial) 7-14
 elliptic function 1-5, 3-1
Disk files See Files
Distributed capacity
 transformations to avoid 10-8, 11-4
 on Zig-zag example 8-4, 10-11
 in elliptic bandpass 21-9, 21-18, 21-29, 8-1
Dual
 "D" coupling 2-3, 7-4
 inter-network 7-2, 7-4
 using circuit editor 21-19, 21-28
 with notch sections 6-2
Elliptic function 3-1, 13-6
Error level (TEM spacing) 14-7
Error messages
 optimization 22-8
[Back] key 1-9, 2-4, 22-7

- Files
 - general 1-2, 1-3
 - coaxial dimensions 7-12
 - save / recall designs 1-3
 - sorted directory of 1-3
 - Spice / PSPICE See LCSPICE.EXE program provided
 - standard library (ref.) 3-8
 - .DZN design 5-1
 - structure 5-1
 - reading / writing 5-7
 - .SPK specification 1-2, 2-1
 - .PPD pole placer 1-2, 10-1
 - .?HC Documentation 4-1, 7-14, 17-3
 - .DAT 1-7, 7-12
 - temporary files 1-1, 21-13
 - Touchstone(R) 1-8
- Filter designs See Design types
- Forcing part values 6-3, 7-3, 7-13, 21-8, 21-13, 22-6
- Fourier analysis See Impulse response
- Frequency
 - analysis sweep 16-1
 - markers 18-5
 - normalized (Radians) 1-6, 2-5, 3-5
 - range transfer 18-5, 19-2, 22-5
- G values See Normalized reference
- Geffe narrow-band notch 13-1
- Group delay
 - analysis 16-1
 - equalization 12-1, 22-1
- Impedance
 - complex ($R \pm jX$) 4-3, 16-2, 17-7
 - design Z_o 2-2
 - even / odd mode (z_{oe}, z_{oo}) ... 4-2, 14-3
 - graphing & Smith chart 18-1
 - inverter (j, k) 7-2, 21-19
 - matching 9-1
 - ratio of 2 branches 21-27
 - source / termination Z_o 2-3, 21-4, 21-7
- Impulse response 1-7, 19-1
- Inductors, design of Appendix E
- Installation 1-1
- K and Q values See Normalized reference
- Markers (frequency) 18-5
- Matcher status 9-1, 9-2
- Menus, bottom select 1-9
- Microstrip filters
 - notch filters 15-2, 15-3
 - bandpass using stub gen. 23-3
 - Lowpass example Appendix B
- Models (predefined networks) .. 5-1, 21-4
- Multiplexers 2-3, 20-1
- Negative values 21-26, See also Transforms, Norton
- Network analysis
 - component "Q" 16-1
 - group delay modes 16-1
 - running analysis 1-12, 16-1
 - sub-network codes 5-1, 10-5
 - tabulated data 4-3
 - voltage / current 17-6
- Noise bandwidth 1-7

- Normalized reference 3-2
 - "k" & "q" or G values 3-3
 - linear phase 3-8
 - saving / making 1-8
 - standard library 3-8
 - external 3-3
 - scaling procedure 6-1
- Norton transforms See Transforms
- Notation See Units
- Notch sections 2-3, 6-1, 7-2, 7-7, 11-5, 13-1
- Optimization 1-7, 10-3, 22-1
- Order, determining N=? 2-5
- Phase linearity 18-3
- Plot
 - hard copies of See printing
 - scale factors
 - automatic 18-1
 - temporary set manually 18-6
 - Personal logo on 18-7
- Pole placer
 - bandpass 10-1
 - example 11-1
 - sub-networks 10-5, 10-6, 10-7
 - lowpass 3-5, 6-5, 7-7, 7-14
 - sub-networks 3-6, 10-6
- Port (forward or side mpx) 20-1
 - changing forward port 21-22, 21-27
- Predistorted See "k" and "q" values
- Preset ratio 21-25, 21-27
- Printing
 - general 4-1
 - schematic diagrams 4-2
 - graphics screen copies 4-3, 7-14, 18-6, 19-5
- Q (Quality factor)
 - of transmission lines 16-2
 - setting Ql, Qc, Qtrans 1-6, 16-1, 17-3, 22-5
 - estimated Q of TEM filter ... 14-5
- Resistor
 - inserting into designs 21-16
 - in files 5-1, 5-4
 - attenuator (T, Pi and L) 1-9, 21-27
- Schematic drawings (lines) 4-2
- Scroll control
 - analysis data 16-1
 - power analysis 17-1
- Shunt capacitors
 - LPBP forced shunt 6-3
 - coupling 7-1, 7-2, 21-19
- Shunt numbers 17-1
- Simulation See Network analysis
 - Touchstone (R) net-lists 1-8
- Smith chart 18-1, 18-4
- Specifications 2-1, 10-1
- Standard part values
 - Substituting 21-8
 - Tuning to compensate 22-6
 - Forcing with Norton 21-13
- Standard library See Normalized reference
- Start up 1-1
- Temporary files 1-1

- Transforms
 - Dipole equivalent 8-5, 13-2, 21-11
 - Kuroda
 - automatic 15-2, 15-4, 15-6
 - manual, circuit editor 21-21
 - Norton
 - manual, circuit editor
 - Xform command 21-23
 - shunt inductor 21-20
 - negative values 21-23, 21-26
 - setting Zo ratio 21-27
 - forcing branch values ... 21-13
 - automatic See Design types, common bandpass, LPBP
 - "X" coupling 7-5
- Transmission lines
 - notch filters 15-1
 - replacing L-C networks 23-1
 - Q of 14-5, 16-2
- Triplets (Coupled) Appendix D, 21-10
- Tutorial 1-10
- Units
 - component value notation 1-6
- VSWR 17-7
- Z coupling 7-8
- Zeros (of transmission) 10-1, See also Z coupling