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;
;No. Circuits No. Phases Length Frequency Gnd. R. No. Bundles
1 6 3.20000E+00 6.00000E+01 1.00000E+02 1
;
;
; Circuit 1
;P NB Bundle Rad Resistance Diameter GMR Heigth Sag Horz. X
A 1 1.00000E+00 7.59000E-02 1.34500E+00 4.45000E-02 5.50000E+01 0.00000E+00 -7.75000E+00
B 1 1.00000E+00 7.59000E-02 1.34500E+00 4.45000E-02 4.25000E+01 0.00000E+00 -8.00000E+00
C 1 1.00000E+00 7.59000E-02 1.34500E+00 4.45000E-02 3.00000E+01 0.00000E+00 -8.25000E+00
D 1 1.00000E+00 7.59000E-02 1.34000E+00 4.45000E-02 5.50000E+01 0.00000E+00 7.75000E+00
E 1 1.00000E+00 7.59000E-02 1.34000E+00 4.45000E-02 4.25000E+01 0.00000E+00 8.00000E+00
F 1 1.00000E+00 7.50000E-02 1.34000E+00 4.45000E-02 3.00000E+01 0.00000E+00 8.25000E+00
S1 0 1.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
S2 0 1.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00

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Circuit 1 PC-EMTP line parameters for total line length

Circuit Average Self and Mutual R-L-C, XL and XC

Rs= 5.37725E-01 Ls= 1.14045E-02 Cs= 4.51843E-08 XLs= 4.29940E+00 XCs= 5.87058E+04
Rm= 2.95301E-01 Lm= 5.19946E-03 Cm=-5.16698E-09 XLm= 1.96015E+00 XCm=-5.13372E+05

Sequence Impedance - Distributed Line Parameter Model

R zero = 2.01423E+00 L zero = 3.74018E-02 C zero = 1.93494E-08 XL zero = 1.41002E+01 XC zero = 1.37088E+05
R pos = 2.42424E-01 L pos = 6.20506E-03 C pos = 5.03513E-08 XL pos = 2.33925E+00 XC pos = 5.26815E+04
R neg = R pos, L Neg = L pos, and C neg = C pos

Model Surge Impedance - Distributed Line Parameter Model

Z0= 1.39735E+03 at -4.06489E+00 deg. Travel speed = 1.18951E+05 miles/sec
Z1= 3.51988E+02 at -2.95831E+00 deg. Travel speed = 1.81039E+05 miles/sec

Circuit 1 Z11 matrix, R in ohms, L in henries

1 R	5.35522E-01	2.93962E-01	2.95300E-01	2.92629E-01	2.93948E-01	2.95285E-01
1 L	1.14124E-02	5.60124E-03	4.88338E-03	5.38381E-03	5.11184E-03	4.70680E-03
2 R	2.93962E-01	5.38180E-01	2.96656E-01	2.93948E-01	2.95285E-01	2.96640E-01
2 L	5.60124E-03	1.14045E-02	5.59337E-03	5.11184E-03	5.34327E-03	5.08398E-03
3 R	2.95300E-01	2.96656E-01	5.40913E-01	2.95285E-01	2.96640E-01	2.98014E-01
3 L	4.88338E-03	5.59337E-03	1.13966E-02	4.70680E-03	5.08398E-03	5.30368E-03
4 R	2.92629E-01	2.93948E-01	2.95285E-01	5.35522E-01	2.93962E-01	2.95300E-01
4 L	5.38381E-03	5.11184E-03	4.70680E-03	1.14124E-02	5.60124E-03	4.88338E-03
5 R	2.93948E-01	2.95285E-01	2.96640E-01	2.93962E-01	5.38180E-01	2.96656E-01
5 L	5.11184E-03	5.34327E-03	5.08398E-03	5.60124E-03	1.14045E-02	5.59337E-03
6 R	2.95285E-01	2.96640E-01	2.98014E-01	2.95300E-01	2.96656E-01	5.38033E-01

6 L 4.70680E-03 5.08398E-03 5.30368E-03 4.88338E-03 5.59337E-03 1.13966E-02

Circuit 1 C11 Capacitance Matrix in farads.

1 C	4.37878E-08	-8.48838E-09	-3.16782E-09	-7.62081E-09	-4.35775E-09	-2.10804E-09
2 C	-8.48838E-09	4.61813E-08	-7.80498E-09	-4.35757E-09	-5.32768E-09	-3.62873E-09
3 C	-3.16782E-09	-7.80498E-09	4.56244E-08	-2.10796E-09	-3.62877E-09	-5.46843E-09
4 C	-7.62081E-09	-4.35757E-09	-2.10796E-09	4.37629E-08	-8.47795E-09	-3.16444E-09
5 C	-4.35775E-09	-5.32768E-09	-3.62877E-09	-8.47795E-09	4.61527E-08	-7.79540E-09
6 C	-2.10804E-09	-3.62873E-09	-5.46843E-09	-3.16444E-09	-7.79540E-09	4.55970E-08

Circuit 1 Pi-Section - Mutually Coupled Line Model Format (Absolute)

Type	Ns	Nd	R	L	C	Sw	Nc	Limit	ID
6	NAs	NAd	5.35522E-01	1.14124E-02	4.37878E-08	0	/	0.000E+00	0
			2.93962E-01	5.60124E-03	-8.48838E-09				
			2.95300E-01	4.88338E-03	-3.16782E-09				
			2.92629E-01	5.38381E-03	-7.62081E-09				
			2.93948E-01	5.11184E-03	-4.35775E-09				
			2.95285E-01	4.70680E-03	-2.10804E-09				
5	NBs	NBd	5.38180E-01	1.14045E-02	4.61813E-08	0	/	0.000E+00	0
			2.96656E-01	5.59337E-03	-7.80498E-09				
			2.93948E-01	5.11184E-03	-4.35757E-09				
			2.95285E-01	5.34327E-03	-5.32768E-09				
			2.96640E-01	5.08398E-03	-3.62873E-09				
4	NCs	NCd	5.40913E-01	1.13966E-02	4.56244E-08	0	/	0.000E+00	0
			2.95285E-01	4.70680E-03	-2.10796E-09				
			2.96640E-01	5.08398E-03	-3.62877E-09				
			2.98014E-01	5.30368E-03	-5.46843E-09				
3	NDs	NDd	5.35522E-01	1.14124E-02	4.37629E-08	0	/	0.000E+00	0
			2.93962E-01	5.60124E-03	-8.47795E-09				
			2.95300E-01	4.88338E-03	-3.16444E-09				
2	NEs	NEd	5.38180E-01	1.14045E-02	4.61527E-08	0	/	0.000E+00	0
			2.96656E-01	5.59337E-03	-7.79540E-09				
1	NFs	NFd	5.38033E-01	1.13966E-02	4.55970E-08	0	/	0.000E+00	0

Circuit 1 Pi-Section - Mutually Coupled Line Model Format (OHMS)

Type	Ns	Nd	R	jXL	-jXC	Sw	Nc	Limit	ID
J 6	NAs	NAd	5.35522E-01	4.30237E+00	6.05781E+04	0	/	0.000E+00	0
			2.93962E-01	2.11162E+00	-3.12496E+05				
			2.95300E-01	1.84099E+00	-8.37353E+05				
			2.92629E-01	2.02965E+00	-3.48071E+05				
			2.93948E-01	1.92712E+00	-6.08704E+05				
			2.95285E-01	1.77442E+00	-1.25832E+06				
J 5	NBs	NBd	5.38180E-01	4.29941E+00	5.74384E+04	0	/	0.000E+00	0
			2.96656E-01	2.10865E+00	-3.39858E+05				
			2.93948E-01	1.92712E+00	-6.08730E+05				
			2.95285E-01	2.01436E+00	-4.97887E+05				
			2.96640E-01	1.91662E+00	-7.30995E+05				

J 4	NCs	NCd	5.40913E-01	4.29643E+00	5.81396E+04	0	/	0.000E+00	0
			2.95285E-01	1.77442E+00	-1.25836E+06				
			2.96640E-01	1.91662E+00	-7.30987E+05				
			2.98014E-01	1.99944E+00	-4.85072E+05				
J 3	NDs	NDd	5.35522E-01	4.30237E+00	6.06126E+04	0	/	0.000E+00	0
			2.93962E-01	2.11162E+00	-3.12880E+05				
			2.95300E-01	1.84099E+00	-8.38248E+05				
J 2	NEs	NEd	5.38180E-01	4.29941E+00	5.74741E+04	0	/	0.000E+00	0
			2.96656E-01	2.10865E+00	-3.40275E+05				
J 1	NFs	NFd	5.38033E-01	4.29643E+00	5.81745E+04	0	/	0.000E+00	0

NOTE: The <J> in the first column flags the PC-EMTP that the jXL and -jXC fields are in ohms at the system pre-fault frequency.

Circuit 1 Distributed Parameter - Mutually Coupled Line Model Format (Absolute)

Type	Ns	Nd	R	L	C	Sw	Nc	Limit	ID
6	NAs	NAd	2.01423E+00	3.74018E-02	1.93494E-08	0	/	0.000E+00	0
5	NBs	NBd	2.42424E-01	6.20506E-03	5.03513E-08	0	/	0.000E+00	0
4	NCs	NCd				0	/	0.000E+00	0
3	NDs	NDd				0	/	0.000E+00	0
2	NEs	NEd				0	/	0.000E+00	0
1	NFs	NFd				0	/	0.000E+00	0

Circuit 1 Distributed Parameter - Mutually Coupled Line Model Format (OHMS)

Type	Ns	Nd	R	Z	Tau	Sw	Nc	Limit	ID
J 6	NAs	NAd	2.01423E+00	1.39735E+03	2.69018E+01	0	/	0.000E+00	0
J 5	NBs	NBd	2.42424E-01	3.51988E+02	1.76758E+01	0	/	0.000E+00	0
J 4	NCs	NCd				0	/	0.000E+00	0
J 3	NDs	NDd				0	/	0.000E+00	0
J 2	NEs	NEd				0	/	0.000E+00	0
J 1	NFs	NFd				0	/	0.000E+00	0

NOTE: The <J> in the first column flags the PC-EMTP that the L field is Z0 or Z1 ohms and the C field is Tau0 or Taul microseconds.