\*

.model D2D212A D(Is=10.09p Rs=.11 Ikf=.2752 N=1 Xti=3 Eg=1.11 Cjo=193.2p

+ M=.3801 Vj=.75 Fc=.5 Isr=5.975u Nr=2 Bv=250.3 Ibv=.1P

+ Tt=432.8n)

\*

.model D2d2997a D(Is=292.9p Rs=3.244m Ikf=.6194 N=1 Xti=3 Eg=1.11 Cjo=3.283n

+ M=.4371 Vj=.75 Fc=.5 Isr=17.38u Nr=2 Bv=200.1 Ibv=12.93m

+ Tt=100.1n)

\*

.model D2d2997b D(Is=292.9p Rs=3.244m Ikf=.6194 N=1 Xti=3 Eg=1.11 Cjo=3.283n

+ M=.4371 Vj=.75 Fc=.5 Isr=17.38u Nr=2 Bv=100.1 Ibv=12.93m

+ Tt=100.1n)

\*

.model D2d2997v D(Is=292.9p Rs=3.244m Ikf=.6194 N=1 Xti=3 Eg=1.11 Cjo=3.283n

+ M=.4371 Vj=.75 Fc=.5 Isr=17.38u Nr=2 Bv=50.1 Ibv=12.93m

+ Tt=100.1n)

\*

.model D2d2998a D(Is=2.978u Rs=2.654m Ikf=14.37 N=1 Xti=3 Eg=1.11 Cjo=2.789n

+ M=.3852 Vj=.75 Fc=.5 Isr=6.189m Nr=2 Bv=14.93 Ibv=1.293m

+ Tt=100.1n)

\*

++++++++++++.model D2d2998b D(Is=2.978u Rs=2.654m Ikf=14.37 N=1 Xti=3 Eg=1.11 Cjo=2.789n

+ M=.3852 Vj=.75 Fc=.5 Isr=6.189m Nr=2 Bv=24.93 Ibv=1.293m

+ Tt=100.1n)

\*

.model D2d2998b D(Is=2.978u Rs=2.654m Ikf=14.37 N=1 Xti=3 Eg=1.11 Cjo=2.789n

+ M=.3852 Vj=.75 Fc=.5 Isr=6.189m Nr=2 Bv=34.93 Ibv=1.293m

+ Tt=100.1n)

\*

.model D2d231a D(Is=304f Rs=4.988m Ikf=28.24 N=1 Xti=3 Eg=1.11 Cjo=838.3p

+ M=.4544 Vj=.75 Fc=.5 Isr=4.491u Nr=2 Bv=150.2 Ibv=.5173

+ Tt=24.58n)

\*

.model D2d231b D(Is=304f Rs=4.988m Ikf=28.24 N=1 Xti=3 Eg=1.11 Cjo=838.3p

+ M=.4544 Vj=.75 Fc=.5 Isr=4.491u Nr=2 Bv=200.2 Ibv=.5173

+ Tt=24.58n)

\*

.model D2d251a D(Is=304f Rs=4.988m Ikf=28.24 N=1 Xti=3 Eg=1.11 Cjo=838.3p

+ M=.4544 Vj=.75 Fc=.5 Isr=4.491u Nr=2 Bv=50.2 Ibv=.5173

+ Tt=24.58n)

\*

.model D2d251b D(Is=304f Rs=4.988m Ikf=28.24 N=1 Xti=3 Eg=1.11 Cjo=838.3p

+ M=.4544 Vj=.75 Fc=.5 Isr=4.491u Nr=2 Bv=70.2 Ibv=.5173

+ Tt=24.58n)

\*

.model D2d251v D(Is=304f Rs=4.988m Ikf=28.24 N=1 Xti=3 Eg=1.11 Cjo=838.3p

+ M=.4544 Vj=.75 Fc=.5 Isr=4.491u Nr=2 Bv=100.2 Ibv=.5173

+ Tt=24.58n)

\*

.model D2d906a D(Is=4.54p Rs=1.976 Ikf=490.8u N=1 Xti=.1 Eg=1.11 Cjo=39.43p

+ M=.3333 Vj=.75 Fc=.5 Isr=429.5n Nr=2 Bv=80.25 Ibv=646.6u

+ Tt=577.1n)

\*

.model D2d510a D(Is=48.25p Rs=.4715 Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=4p M=.3333

+ Vj=.75 Fc=.5 Isr=1.227u Nr=2 Bv=50.22 Ibv=517.3u Tt=2.232n)

\*

.model D2D522A D(Is=48.25p Rs=.4715 Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=2.658p M=.154 Vj=.75

+ Fc=.5 Isr=2.612u Nr=2 Bv=50.19 Ibv=258.6u Tt=2.232n)

\*

.model D2d202a D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=49.74 Ibv=51.73n

+ Tt=721.3u)

\*

.model D2d202v D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=99.74 Ibv=51.73n

+ Tt=721.3u)

\*

.model D2d202g D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=99.74 Ibv=51.73n

+ Tt=721.3u)

\*

.model D2d202d D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=199.74 Ibv=51.73n

+ Tt=721.3u)

\*

20.model D2d202e D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=199.74 Ibv=51.73n

+ Tt=721.3u)

\*

.model D2d202j D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=299.74 Ibv=51.73n

+ Tt=721.3u)

\*

.model D2d202i D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=299.74 Ibv=51.73n

+ Tt=721.3u)

\*

.model D2d202k D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=399.74 Ibv=51.73n

+ Tt=721.3u)

\*

.model D2d202l D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=399.74 Ibv=51.73n

+ Tt=721.3u)

\*

25.model D2d202m D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=499.74 Ibv=51.73n

+ Tt=721.3u)

\*

.model D2d202n D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=499.74 Ibv=51.73n

+ Tt=721.3u)

\*

.model D2d202r D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=599.74 Ibv=51.73n

+ Tt=721.3u)

\*

.model D2d202c D(Is=24.65n Rs=64.48m Ikf=0 N=1 Xti=3 Eg=1.11 Cjo=38.32p

+ M=.3522 Vj=.75 Fc=.5 Isr=226.6u Nr=2 Bv=599.74 Ibv=51.73n

+ Tt=721.3u)

\*

.model D2d204a D(Is=3.525p Rs=1.32 Ikf=.1402 N=1 Xti=3 Eg=1.11 Cjo=32.42p

+ M=.2894 Vj=.75 Fc=.5 Isr=24.36u Nr=2 Bv=399.8 Ibv=344.9n

+ Tt=2.164u)

\*

30.model D2d204b D(Is=3.525p Rs=1.32 Ikf=.1402 N=1 Xti=3 Eg=1.11 Cjo=32.42p

+ M=.2894 Vj=.75 Fc=.5 Isr=24.36u Nr=2 Bv=199.8 Ibv=344.9n

+ Tt=2.164u)

**31**.model D102 D(Is=3.525p Rs=1.32 Ikf=.1402 N=1 Xti=3 Eg=1.11 Cjo=32.42p

+ M=.2894 Vj=.75 Fc=.5 Isr=24.36u Nr=2 Bv=199.8 Ibv=344.9n

+ Tt=2.164u)

.model D7L D(Is=1E-016 Rs=1 N=1 Tt=1E-007 Cjo=5E-012

+ Vj=0.8 M=0.5 Eg=1.11 Xti=3 Ikf=0 Fc=0.5

+ Bv=4)

1,0,.005 DCINPUT1-I**(**R1**)**\*10 I**(**R1**)**-I**(**R2**)**