

Spice Model for Metelics Step Recovery Diodes

Spice does not include the Transition Time in the diode model. The parameter TT in spice is the minority carrier life time.

Model for MMD805

.MODEL D_805 (IS=500.0E-15 N=1.3 RS=0.13 CJ0=4.55E-12 VJ=0.5 M=0.235 XTI=3.0 EG=1.12 BV=60 IBV=10E-6 TT=30E-9)

Part Number	Rs	CJ0 pF	Minimum Vbr V	TT nS
MMD-805, SMMD805	0.13	4.55 to 6.37	60	30
MMD-810, SMMD810	0.13	2.73 to 4.55	50	30
MMD-820, SMMD820	0.13	1.82 to 3.09	40	30
MMD-830, SMMD830	0.13	0.91 to 1.82	25	20
MMD-832, SMMD832	0.15	0.73 to 1.46	20	12
MMD-835, SMMD835	0.19	0.55 to 1.27	15	10
MMD-837, SMMD837	0.22	0.36 to 0.73	20	10
MMD-840, SMMD840	0.22	0.36 to 0.73	15	10

Is=100fA to 1pA
N=1.2 to 1.4
VJ=0.5
M=0.235
EG=1.12
XTI=3

CJ0=1.82*Cj6

Part Number	Rs	CJ0 pF	Minimum Vbr V	TT nS
MMDB-30	1	0.46	14	1 to 5
MMDB-35	1	0.36	16	1 to 5
MMDB-45	1	0.36	25	1 to 5

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Part Number	Rs	CJ0 pF	Minimum Vbr V	TT nS
MMD0151	0.13	1.04 to 1.25	15	10
MMD0153	0.13	0.60 to 0.77	25	10
MMD0803	0.13	8.5 to 10.92	70	200
MMD0815	0.13	6.0 to 7.28	50	100
MMD0825	0.13	2.2 to 3.64	45	30
MMD0833	0.13	2.0 to 3.0	25	10
MMD0840	0.13	0.9 to 1.09	15	10