Limiter Diodes

The SemiGen SLP7100 series of Limiter Diodes are processed with a high-resistivity epi that have thin intrinsic layers. These devices are typically in the 2 to 20 micron range of epi thickness and can be gold doped to achieve specific performance goals. These diodes are used in passive or active limiter designs in the 100 MHz to 30 GHz frequency ranges. They are ideal for use in high-power applications and can be supplied in chip form or in your choice of packages below.

Features:

- Low Capacitance and Resistance
- Easily Bondable
- Low Loss
- Fast Turn-on Time

Applications:

For use in waveguide, stripline, coax or microstrip in single- or multi-chip devices depending on power handling and performance goals.

Vb TYP (V)	Cj0 TYP (pf)	Cj6 MAX (pf)	Rs Typ @ 10 mA (Ω)	Rs Typ @ 1 mA (Ω)	TL TYP (nS)	Max Thermal Resistance (θC/W)	Max Peak Pin @ 1.0 Ωs (dBm)	Typical Threshold (dB)	Leakage P out TYP (dBm)	Insertion Loss TYP (dB)	CW Pin MAX (W)	Part Number
15-30	0.12	0.10	2.00	4.00	5	120	+47	+7	+19	0.10	2.00	SLP7130
15-30	0.20	0.15	1.50	3.00	5	80	+50	+7	+22	0.10	3.00	SLP7131
20-45	0.20	0.15	1.50	5.00	5	100	+50	+10	+22	0.10	2.00	SLP7100
20-45	0.50	0.30	1.20	4.50	10	80	+53	+10	+24	0.20	3.00	SLP7101
20-45	0.70	0.50	1.00	4.00	10	55	+56	+10	+25	0.20	4.00	SLP7102
30-60	0.12	0.10	2.00	4.00	7	100	+47	+12	+24	0.10	3.00	SLP7140
30-60	0.20	0.15	1.50	4.00	7	70	+50	+12	+27	0.10	4.00	SLP7141
45-75	0.20	0.15	1.50	4.00	10	80	+53	+15	+27	0.10	3.00	SLP7110
45-75	0.50	0.30	1.20	3.50	15	60	+56	+15	+29	0.20	4.00	SLP7111
45-75	0.70	0.50	1.00	3.00	20	40	+59	+15	+31	0.20	5.00	SLP7112
120-180	0.20	0.15	1.50	3.50	50	40	+60	+20	+39	0.10	5.00	SLP7120
120-180	0.60	0.30	1.00	3.00	50	20	+63	+20	+41	0.20	1.00	SLP7121
120-180	0.80	0.50	0.50	3.00	100	15	+66	+20	+44	0.20	1.00	SLP7122

Also available as bare die.