



DC2000, DC2500 & DC2600 Series

MIC PIN DIODES

DESCRIPTION

PIN Diodes for MICs are available in four formats for direct insertion into microstrip circuits.

1. Unencapsulated chips in outlines 41, 44, abcd. 44e and 44f.
2. Unencapsulated chips mounted on small carriers in outlines 50.
3. Unencapsulated chips mounted in capacitor and carrier in outline 46.
4. Beam Lead Diodes in outline 115.

APPLICATIONS

Suitable for use in MICs.

LIMITING CONDITIONS

Storage conditions	-55°C to +150°C
Operating temperature	-55°C to +150°C
Power dissipation	250mW

FEATURES

- Low Resistance
- Low Capacitance
- High Breakdown voltage
- Frequency range 10MHz - 18GHz
- Mesa and Planar versions available

TYPICAL DC CHARACTERISTICS $T_{amb} 25^{\circ}C$

TYPE NUMBER	Outline No.	V_R min.	C_d max. pF @ mA	R_f max. ohm @ mA	Typical minority carrier lifetime (μs)	Cathode terminal °C/W
		V			(μs)	
DC2011	44	100	0.2 @ 50	3 @ 25	2	gold
DC2011A	50	100	0.2 @ 50	3 @ 25	2	tip
DC2011AR	50	100	0.2 @ 50	3 @ 25	2	base
DC2012	46	100	0.2 @ 50	3 @ 25	2	

TYPICAL DC CHARACTERISTICS $T_{amb} 25^{\circ}C$

TYPE NUMBER	Outline No.	V_R min.	C_d max. pF @ mA	R_F max. ohm @ mA	Typical minority carrier lifetime	Cathode terminal °C/W
		V			(μ S)	
DC2013	41	100	0.1 @ 50	3 @ 50	1000	gold
DC2013A	50	100	0.1 @ 50	3 @ 50	1000	tip
DC2013AR	50	100	0.1 @ 50	3 @ 50	1000	base
DC2510A	50	50	0.25 @ 10	2 @ 25	50	base contact
DC2512A	50	25	0.15 @ 10	2 @ 25	30	base contact
DC2518A	50	50	0.15 @ 10	1 @ 100	500	base contact
DC2519A	50	50	0.15 @ 10	1 @ 100	500	top contact
DC2552A	50	25	0.12 @ 20	2 @ 25	30	top contact
DC2602	115	40	0.03 @ 20	10 @ 10*	5	notched lead
DC2603	115	40	0.05 @ 20	10 @ 10*	5	notched lead
DC2604	115	20	0.03 @ 20	10 @ 10*	5	notched lead
DC2605	115	20	0.05 @ 20	10 @ 10*	5	notched lead
DC2608	115	40	0.07 @ 20	3 @ 10*	15	notched lead
DC2609	115	70	0.04 @ 20	5 @ 10*	40	notched lead