



DC1536F/36G

SILICON SCHOTTKY X-BAND MICROSTRIP BEAM LEAD MIXER DIODES

DESCRIPTION

This general purpose diode available in the microstrip package is suitable for applications requiring high performance mixers.

These diodes can be supplied in matched pairs by the addition of the letter M to the type number or with reverse polarity by the addition of the letter R to the type number.

FEATURES

- Low drive LO level
- Excellent If noise
- Low conversion loss
- X band operation

APPLICATIONS

Silicon Schottky mixer diodes are finding increasing applications in instrumentation, military, civil and marine radar and communications systems.

LIMITING CONDITIONS

Storage conditions	-55°C to +150°C
Operating temperature	-55°C to +150°C
Pulse burn out (Duty cycle 0.01%)	400mW
CW burn out	300mW

TYPICAL DC CHARACTERISTICS Tamb 25°C

TYPE NUMBER	DC1536F	DC1536G
Frequency	X Band	X Band
Forward Voltage (Vf) @ 2.5mA	400mV	400mV
Reverse voltage (Vr) @ 10µA	2.0V	2.0V
Rs max. (10mA to 20mA) in Ohms	18	18
C ₁ @ 0V (pF)	50 - 150	55 - 150
Outline	115	115

TYPICAL RF CHARACTERISTICS Tamb 25°C

TYPE NUMBER	DC1536F	DC1536G
Test Freq. (GHz)	9.375	9.375
LO Drive level (mW)	1.0	1.0
IF Impedance at 150µA (Ohms)	450	450
Max. Overall noise figure O.N.F. (dB)	7.0	6.5
Conversion loss (dB)	5.5	5.0