

HF-UHF Medium and High Power RF PIN Diodes

Litec's Silicon PIN Diodes provide excellent performance for HF (High-Frequency) and UHF (Ultra High-Frequency) applications.



PIN Diodes with high isolation and low loss capable of handling medium or high RF power.

Uses for Military/Commercial Switching of Transceivers or Filters.

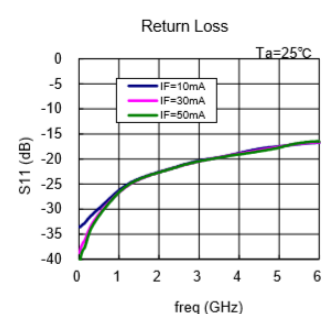
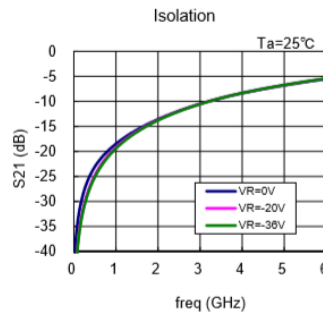
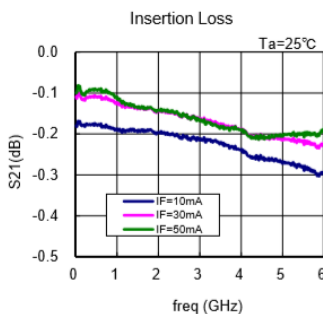
Part No	Frequency typ	VR(V)	Pd(W)	Rfs(Ω)typ IF=50mA, f=100MHz	Ct(pF)typ VR=40V, f=100MHz	Size (mm)
L8104	1~1000MHz	180	3	0.5	0.8	3.5 x 2.2 x 2.2
L8104-240	1~1000MHz	240	3	0.5	0.8	3.5 x 2.2 x 2.2
L8107	0.1~2000MHz	90	1	1.2	0.4	3.5 x 2.2 x 2.2

Surface Mount PIN diodes with small packages for high RF performance requirements



Part No	Frequency typ	VR(V)	Pd(W)	Rfs(Ω)typ IF=50mA, f=100MHz	Ct(pF)typ VR=40V, f=100MHz	Size (mm)
L5204F	1~1200MHz	180	0.5	0.5	0.5	2.5 x 1.2 x 0.8
L5206F	1~4000MHz	180	0.3	1.0	0.15	1.7 x 0.9 x 0.5
L9204F	1~1200MHz	180	1	0.4	0.6	3.5 x 1.6 x 0.5

L5206F



Axial Glass PIN diodes are available for the requirements of legacy Radios and equipment.



Part No	Frequency typ	VR(V)	Pd(W)	Rfs(Ω)typ	Ct(pF)typ	PKG
L204BB	0.1~1000MHz	30	0.2	5.5 IF=10mA, f=50MHz	0.7 VR=15V, f=1MHz	DO-35
L407CD	1~1000MHz	180	1	0.65 IF=50mA, f=470MHz	1.6 VR=0V, f=100MHz	DO-41

L8104-240

PIN Diode

The L8104-240 is a **240V Reverse Voltage** PIN diode targeting High power & High dynamic range requirements

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

SYMBOL	PARAMETER	RATING	UNITS
VR	Reverse Voltage	240	V
PD*	Power Dissipation	3	W
Tj	Junction Temperature	175	°C
Tstg	Storage Temperature Range	-55 to 175	°C

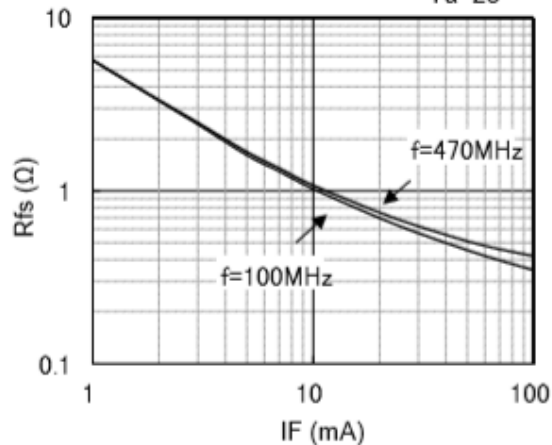
*) 25°C contacts

■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	LIMITS			UNITS
			MIN	TYP	MAX	
IR	Reverse Current	VR = 200V	-	-	10	µA
VF	Forward Voltage	IF = 50mA	-	-	1.0	V
CT	Diode Capacitance	VR = 40V, f = 100MHz	-	-	1.2	pF
Rfs	Forward Series Resistance	IF = 50mA, f = 100MHz	-	0.5	0.75	Ω
RP	Parallel Resistance	VR = 0V, f = 100MHz	1.0	3.0	-	KΩ

Forward Series resistance

vs. Forward Current Ta=25



LITEC PIN diodes have been mounted in radio systems for ambulance cars, fire trucks, police cars and outdoor public speakers



Manufactured in Japan

Litec Corporation continues to supply and develop high quality PIN diodes.