

Electrical Specifications @ 25°C (MA4P1250)

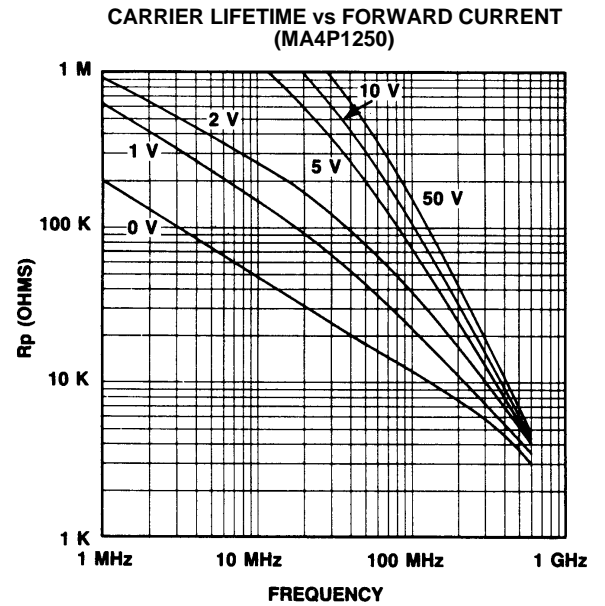
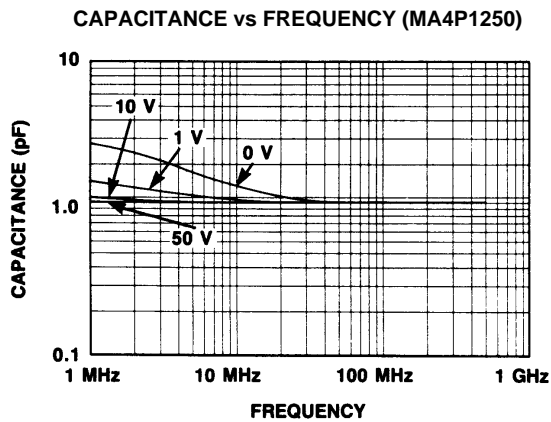
Parameter	Minimum	Typical	Maximum	Unit	Condition
Series Resistance	—	0.5	0.75	Ω	F = 100 MHz I = 50 mA
Capacitance	—	0.9	1.2	pF	F = 1 MHz V = 50 V
Parallel Resistance	5 K	10 K	—	Ω	F = 100 MHz V = 0 V
Carrier Lifetime	2.0	4.0	—	μs	I = 10 mA
Forward Bias Harmonic Distortion (R _a ^{2a} , R _a ^{3a})	80	90	—	dBc	F = 100 MHz P = 30W I = 50 mA
Reverse Bias Harmonic Distortion (R _a ^{2a} , R _a ^{3a})	60	70	—	dBc	F = 100 MHz P = 0 dBm V = 0 V
Voltage Rating	50	—	—	V	I = 10 μA
Forward Voltage	—	1.0	—	V	I = 50 mA

* Available only in case style 1072.

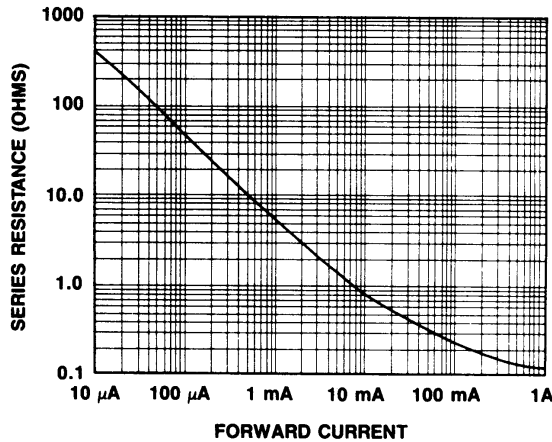
Absolute Maximum Ratings @ 25°C

Parameter	Absolute Maximum
Voltage	50 Volts
Operating Temperature	-65°C to +175°C
Storage Temperature	-65°C to +175°C
Power Dissipation	
Free Air	1.5 Watts
Contact Surfaces @ +25°C	4.0 Watts

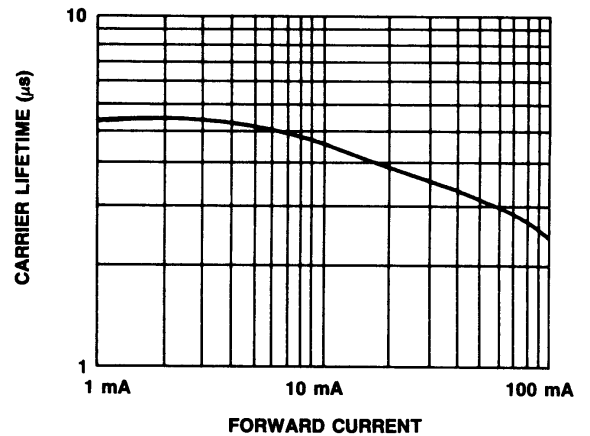
Typical Performance Curves



SERIES RESISTANCE AT 100 MHz vs FORWARD CURRENT (MA4P1250)



PARALLEL RESISTANCE vs FREQUENCY AND REVERSE BIAS (MA4P1250)



Specifications Subject to Change Without Notice.

MA4P1450 PIN Diodes for High Volume Applications
Electrical Specifications @ 25°C

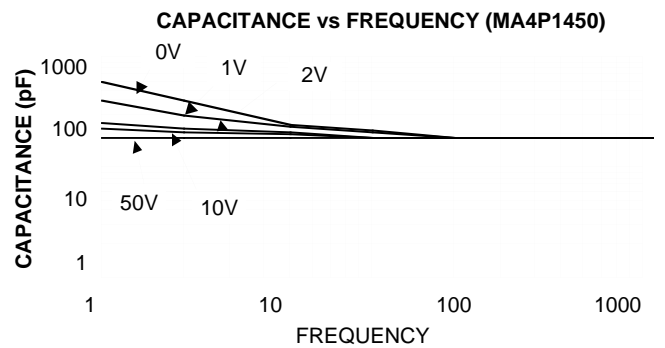
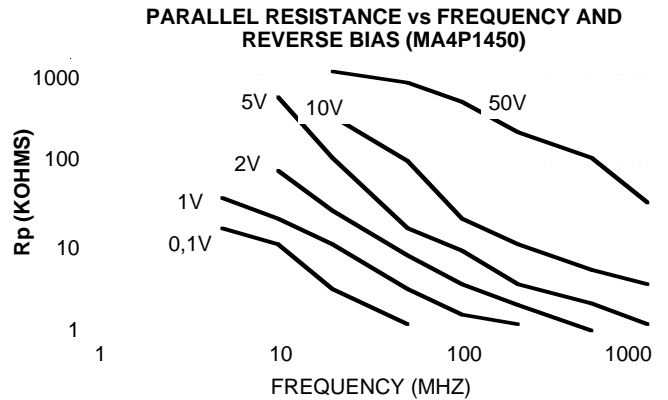
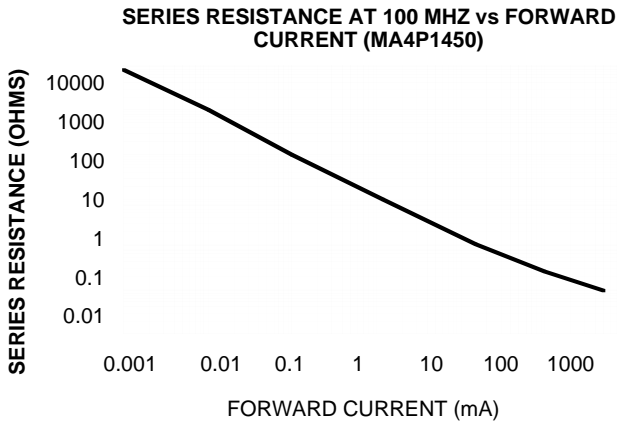
Parameter	Minimum	Typical	Maximum	Unit	Condition
Series Resistance	—	0.5	0.75	Ohms	$I_F = 50 \text{ mA}$ $F = 100 \text{ MHz}$
Capacitance	—	1.8	2.5	pF	$F = 1 \text{ MHz}$ $V_R = 0$
Parallel Resistance	5 K	10 K	—	∅	$F = 100 \text{ MHz}$ $V_R = 0$
Carrier Lifetime	4	6	—	μS	$I_F = 10 \text{ mA}$
Forward Bias Harmonic Distortion (R_{2a} , R_{3a})	80	90	—	dBc	$F = 100 \text{ MHz}$ $P = 30 \text{ W}$ $I_F = 100 \text{ mA}$
Reverse Bias Harmonic Distortion (R_{2a} , R_{3a})	60	70	—	dBc	$F = 100 \text{ MHz}$ $P = 0 \text{ dBm}$ $V = 0 \text{ Volts}$
Voltage Rating	50	—	—	Volts	$I_V = 10 \text{ mA}$
Forward Voltage	1.0	—	—	—	100 mA
Thermal Resistance Junction Case $R_{TH(I-C)}$	—	12.5	15	°C/Watt	—

Note: Available only in case style 1091.

Absolute Maximum Ratings @ 25°C

Parameter	Absolute Maximum
Operating Temperature	-65°C to +175°C
Storage Temperature	-65°C to +175°C
DC Reverse Voltage	50 Volts
Power Dissipation	
Free Air	1.5 Watts
Contact Surfaces @ +25°C	4.0 Watts

Typical Performance Curves



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