

MA42197 Series

Description

Nominal FT = 2.5 GHz

Nominal Current Range = 5 to 40 mA

IC Max. = 100 mA

Frequency = 30 MHz to 600 MHz

Geometry = 60

The MA42197 NPN silicon planar bipolar transistor is designed to provide low noise figure and high gain at low cost. The high gain is due, in part, to the low lead inductance of the standard JEDEC TO-92 package (case style 524). This device exhibits excellent noise figure versus current characteristics which result in extremely low noise performance and wide dynamic range.

The chip used for this device is of planar interdigitated geometry, thermocompression bonded and encapsulated in this rugged package.

Specifications @ $T_A = 25^\circ\text{C}$

Model Number	Test Frequency (MHz)	Collector ¹ Current IC (mA)	Maximum Unilateral Power Gain GU (dB)	Nominal Noise Figures (dB)
MA42197	60	5.0	28	0.80
MA42197	100	5.0	26	0.95
MA42197	450	5.0	13	1.70

NOTES:

1. VCE = 10 volts.
2. (equation)
3. For performance curves, see MA42000 series