

THIN FILM SURFACE MOUNT AMPLIFIER

DESCRIPTION:

The ASMA-201 is a 50 Ohm silicon transistor amplifier featuring internal biasing and feedback networks.

The ASMA-201 will find application in RF/Microwave systems from 1 to 500 MHz requiring superior broadband, high linearity and excellent stability.

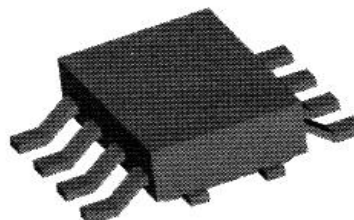
Features:

- Stable 50 Ohm Gain Block
- Cascadable Broadband Performance
- Single Positive Supply Operation
- Replacement for RF Products SMA-201

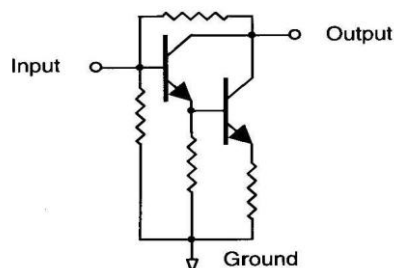
Maximum Ratings $T_c = 25^\circ\text{C}$

SYMBOL	RATING	UNITS
I_D	325	mA
P_{IN}	+27	dBm
T_J	+175	$^\circ\text{C}$
T_{SOLOER}	+260 $^\circ\text{C}$ for 10 Seconds	$^\circ\text{C}$
T_{STG}	-65 to +150	$^\circ\text{C}$

Package Style SOIC 8



Schematic



1, 4, 5 and 8 = Ground
2, 3 = Output 6, 7 = Input

CHARACTERISTICS $I_D = .250\text{ A}$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BW	Frequency Range	---	1	500	MHz
G_p	Small Signal Power Gain	12.8	12.0		dB
ΔG_p	Gain Flatness	± 0.3		± 0.6	dB
NF	Noise Figure (100 MHz)	6.0		7.5	dB
P_{1dB}	Power Output at 1dB Compression	+28	+26		dBm
VSWR	Input	1.6:1		2.0:1	---
	Output	2.0:1		2.5:1	
REV. ISOL.	Reverse Isolation	20	---	---	dB
I_{p2}	Two Tone 2nd Order Intercept Point	+53	---	---	dBm
I_{p3}	Two Tone 3rd Order Intercept Point	+41	---	---	dBm
H_{p2}	Single Tone 2nd Harmonic Intercept Point	+59	---	---	dBm
V_D	Device Voltage	12.5	11.5	13.5	V

Mouser Electronics

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