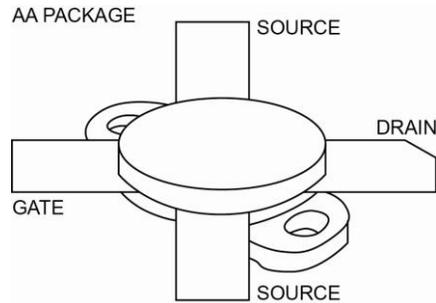


GENERAL DESCRIPTION

Silicon VDMOS and LDMOS transistors designed specifically for broadband RF applications. Suitable for Military Radios, Cellular and Paging Amplifier Base Stations, Broadcast FM/AM, MRI, Laser Drives and others.

The AMS process features low feedback and output capacitances, resulting in high F_t transistors with high input impedance and high efficiency.



SILICON GATE ENHANCEMENT MODE

RF POWER VDMOS TRANSISTOR

25.0 Watts Single Ended

Package Style AA

HIGH EFFICIENCY, LINEAR HIGH
GAIN, LOW NOISE ROHS
COMPLIANT

ABSOLUTE MAXIMUM RATINGS (T = 25 °C)

Total Device Dissipation	Junction to Case Thermal Resistance	Maximum Junction Temperature	Storage Temperature	DC Drain Current	Drain to Gate Voltage	Drain to Source Voltage	Gate to Source Voltage
60 Watts	2.80 °C/W	200 °C	-65 °C to 150 °C	3.5 A	70 V	70 V	20 V

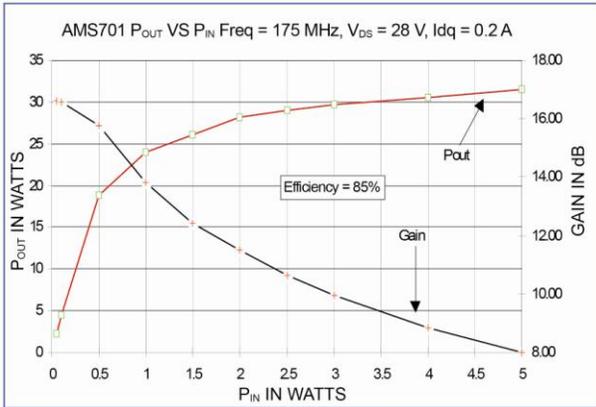
RF CHARACTERISTICS (25.0 WATTS OUTPUT)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Gps	Common Source Power Gain	13			dB	$I_{dq} = 0.20$ A, $V_{ds} = 28.0$ V, $F = 175$ MHz
n	Drain Efficiency		85		%	$I_{dq} = 0.20$ A, $V_{ds} = 28.0$ V, $F = 175$ MHz
VSWR	Load Mismatch Tolerance			20:1	Relative	$I_{dq} = 0.20$ A, $V_{ds} = 28.0$ V, $F = 175$ MHz

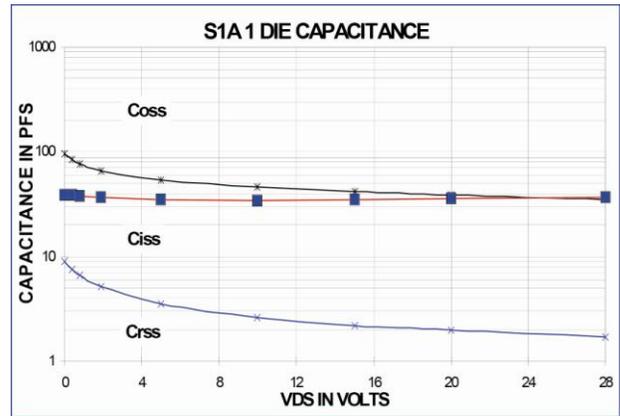
ELECTRICAL CHARACTERISTICS (EACH SIDE)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Bvdss	Drain Breakdown Voltage	65			V	$I_{ds} = 20.00$ mA, $V_{gs} = 0$ V
Idss	Zero Bias Drain Current			1.0	mA	$V_{ds} = 28.0$ V, $V_{gs} = 0$ V
Igss	Gate Leakage Current			1	uA	$V_{ds} = 0$ V, $V_{gs} = 30$ V
Vgs	Gate Bias for Drain Current	2		5	V	$I_{ds} = 0.10$ A, $V_{gs} = V_{ds}$
gM	Forward Transconductance		1.2		Mho	$V_{ds} = 10$ V, $V_{gs} = 5$ V
Rdson	Saturation Resistance		0.85		Ohm	$V_{gs} = 20$ V, $I_{ds} = 2.50$ A
Idsat	Saturation Current		7.00		Amp	$V_{gs} = 20$ V, $V_{ds} = 10$ V
Ciss	Common Source Input Capacitance		50.0		pF	$V_{ds} = 28.0$ V, $V_{gs} = 0$ V, $F = 1$ MHz
Crss	Common Source Feedback Capacitance		3.0		pF	$V_{ds} = 28.0$ V, $V_{gs} = 0$ V, $F = 1$ MHz
Coss	Common Source Output Capacitance		32.0		pF	$V_{ds} = 28.0$ V, $V_{gs} = 0$ V, $F = 1$ MHz

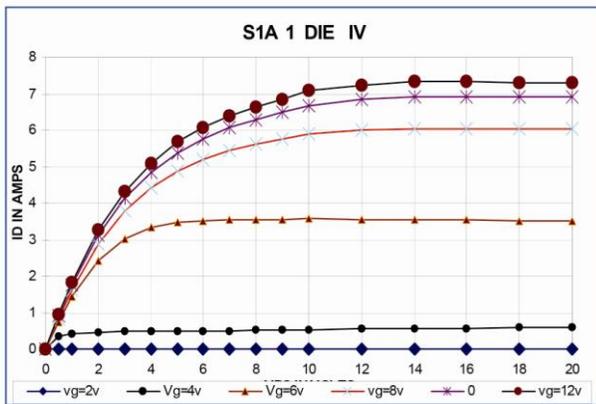
P_{OUT} VS P_{IN} GRAPH



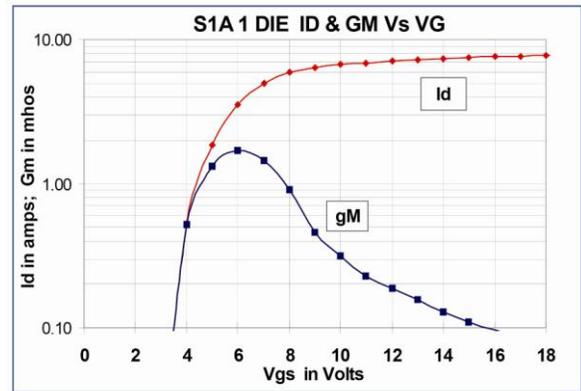
CAPACITANCE vs VOLTAGE



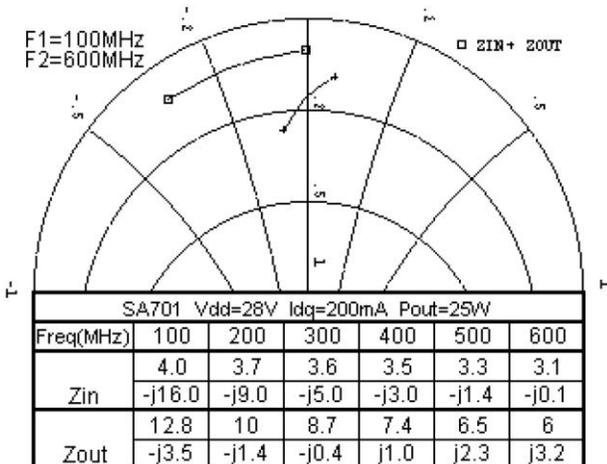
IV CURVE



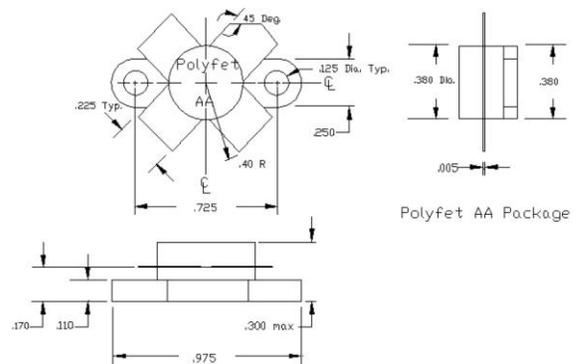
ID & GM vs Vgs



Zin Zout



Package Dimensions in Inches



Tolerance .XX +/-0.01 .XXX +/- .005 inches

