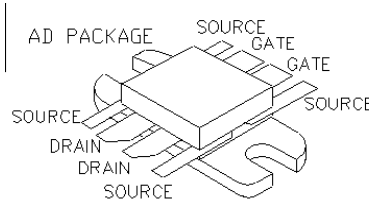




General Description

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 Driver and others.

"Polyfet"TM process features gold metal for greatly extended lifetime. Low output capacitance and high F_t enhance broadband performance



PATENTED GOLD METALIZED SILICON GATE ENHANCEMENT MODE RF POWER VDMOS TRANSISTOR

100Watts Push - Pull

Package Style AD

HIGH EFFICIENCY, LINEAR, HIGH GAIN, LOW NOISE

ABSOLUTE MAXIMUM RATINGS (TC = 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
290 Watts	0.6 °C/W	200 °C	-65 °C to 150 °C	16 A	70 V	70V	30V

RF CHARACTERISTICS (100WATTS OUTPUT)

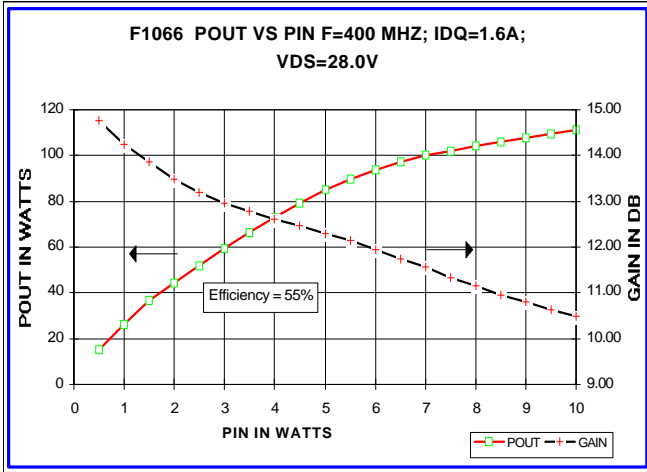
SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Gps	Common Source Power Gain	10			dB	Idq = 1.6 A, Vds = 28.0V, F = 400 MHz
η	Drain Efficiency		60		%	Idq = 1.6 A, Vds = 28.0V, F = 400 MHz
VSWR	Load Mismatch Toleranc			20:1	Relative	Idq = 1.6 A, Vds = 28.0V, F = 400 MHz

ELECTRICAL CHARACTERISTICS (EACH SIDE)

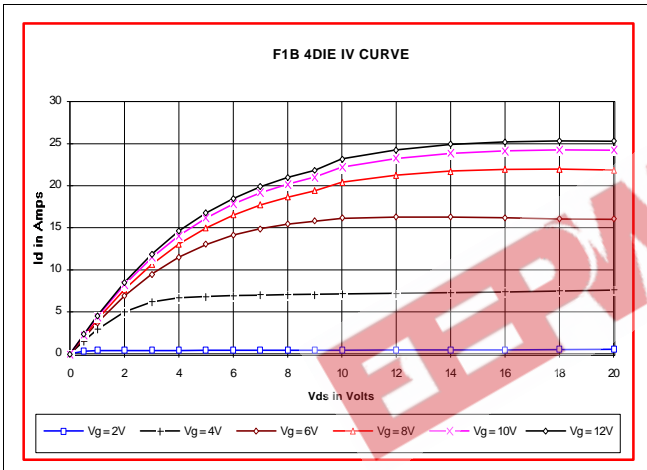
SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Bvdss	Drain Breakdown Voltag	65			V	Ids = 0.2A, Vgs = 0V
Idss	Zero Bias Drain Curren			4	mA	Vds = 28.0 V, Vgs = 0V
Igss	Gate Leakage Curren			1	uA	Vds = 0 V, Vgs = 30V
Vgs	Gate Bias for Drain Curren	1		7	V	Ids = 0.4 A, Vgs = Vds
gM	Forward Transconductanc		3.2		Mho	Vds = 10V, Vgs = 5V
Rdson	Saturation Resistanc		0.35		Ohm	Vgs = 20V, Ids = 16A
Idsat	Saturation Curren		22		Amp	Vgs = 20V, Vds = 10V
Ciss	Common Source Input Capacitanc		132		pF	Vds = 28.0 V, Vgs = 0V, F = 1 MHz
Crss	Common Source Feedback Capacitanc		16		pF	Vds = 28.0 V, Vgs = 0V, F = 1 MHz
Coss	Common Source Output Capacitanc		80		pF	Vds = 28.0 V, Vgs = 0V, F = 1 MHz

F1066

POUT VS PIN GRAPH

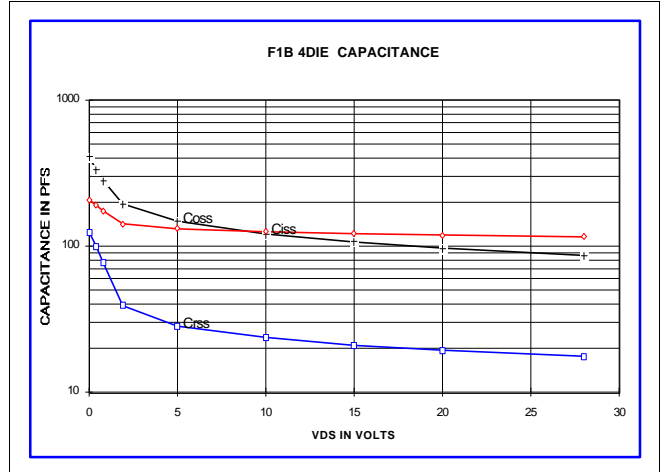


IV CURVE

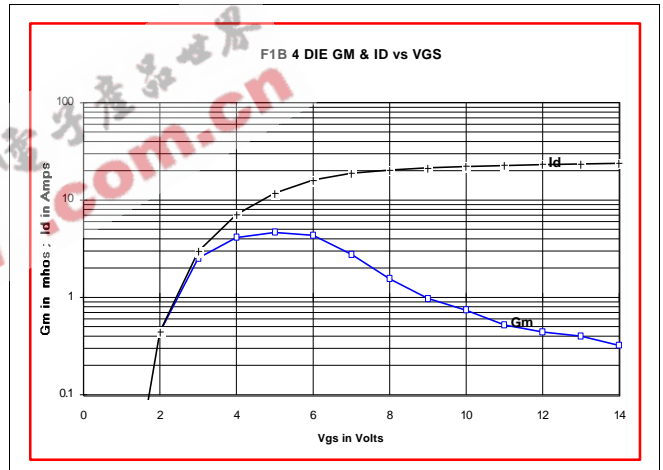


ID AND GM VS VGS

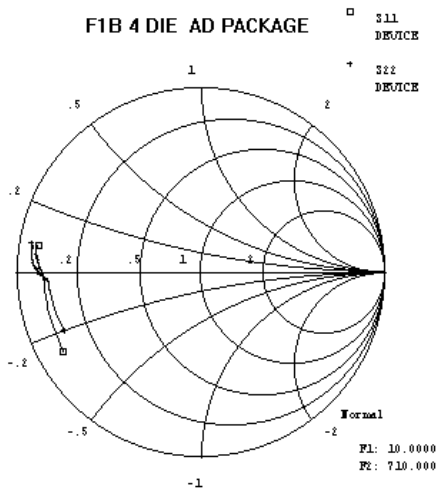
CAPACITANCE VS VOLTAGE



GM IN MHOS ; Id IN AMPS vs VGS



S11 AND S22 SMITH CHART



PACKAGE DIMENSIONS IN INCHES

