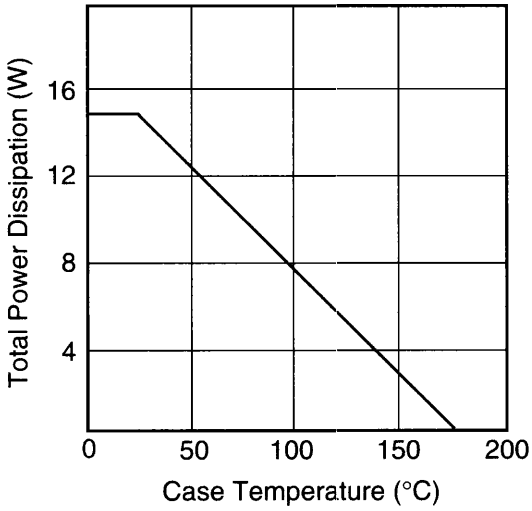
ELECTRICAL CHARACTERISTICS (Ambient Temperature Ta=25°C)

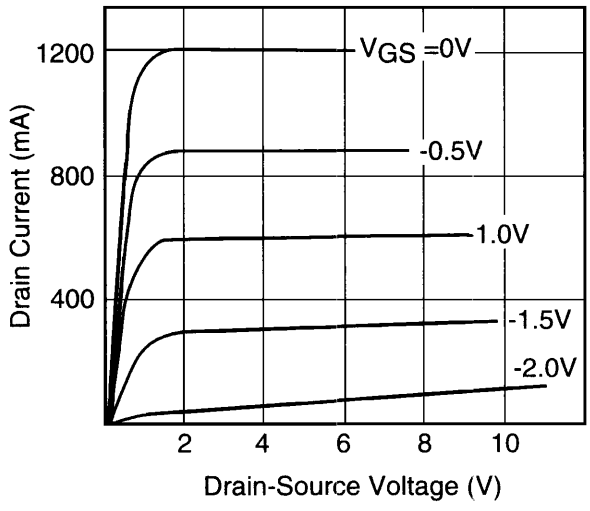
Item	Symbol	Test Conditions	Limit			Unit
			Min.	Typ.	Max.	
Saturated Drain Current	I_{DSS}	V_{DS} = 5V, V_{GS} = 0V	-	1200	1800	mA
Transconductance	gm	V_{DS} = 5V, I_{DS} = 800mA	-	600	-	mS
Pinch-off Voltage	V_p	V_{DS} = 5V, I_{DS} = 60mA	-1.0	-2.0	-3.5	V
Gate Source Breakdown Voltage	V_{GSO}	I_{GS} = -60μA	-5	-	-	V
Output Power at 1dB Gain Compression Point	P_{1dB}	V_{DS} = 10V $I_{DS} \approx 0.6I_{DSS}$ f = 4GHz	33.5	34.8	-	dBm
Power Gain at 1dB Gain Compression Point	G_{1dB}		8.5	9.5	-	dB
Power-added Efficiency	η_{add}		-	37	-	%
Thermal Resistance	R_{th}		-	8	10	°C/W

Note: RF parameter sample size 10pcs. criteria (accept/reject)=(2/3)
refer to page 7 for Absolute Maximum Ratings.

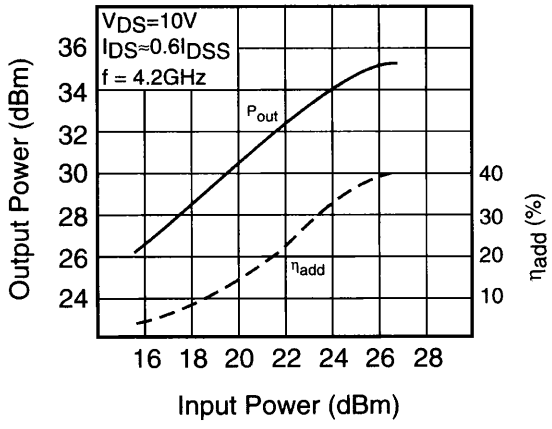
POWER DERATING CURVE



DRAIN CURRENT vs. DRAIN-SOURCE VOLTAGE



OUTPUT POWER vs. INPUT POWER



FUJITSU

S-PARAMETERS

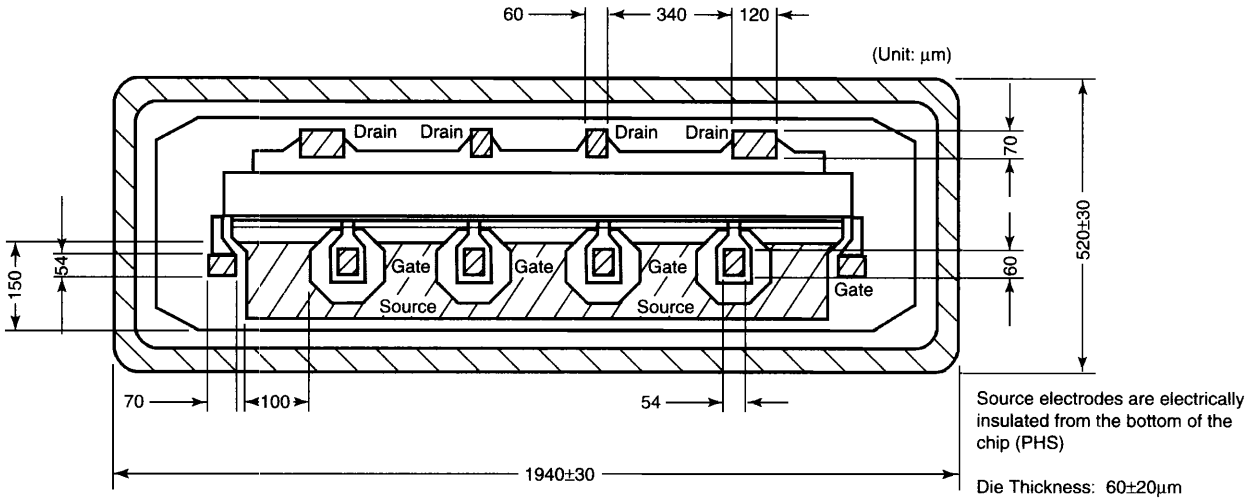
V_{DS} = 10V, I_{DS} = 800mA

FREQUENCY	S11		S21		S12		S22	
(MHZ)	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
100	.919	-52.0	15.119	148.3	.016	52.4	.267	-152.6
500	.885	-136.3	6.290	107.8	.030	19.9	.458	-159.9
1000	.915	-157.4	3.367	88.5	.032	10.9	.497	-163.2
2000	.928	-169.8	1.669	67.9	.030	7.1	.557	-161.7
3000	.935	-174.8	1.064	52.7	.028	9.8	.625	-160.9
4000	.939	-177.8	.748	40.1	.026	17.6	.691	-161.9
5000	.944	179.9	.562	29.2	.025	27.5	.747	-163.6
6000	.949	178.0	.438	20.1	.026	39.3	.794	-165.8
7000	.953	176.2	.354	11.8	.029	48.8	.831	-167.9
8000	.955	174.5	.292	4.9	.033	55.4	.860	-170.0
9000	.955	172.8	.245	-.9	.039	59.5	.883	-172.1
10000	.955	171.2	.206	-5.0	.045	62.0	.900	-174.1
11000	.955	169.5	.176	-7.6	.052	63.3	.913	-176.1
12000	.956	167.9	.154	-9.2	.059	63.8	.923	-177.9

NOTE:* The data includes bonding wires.

n: number of wires Gate n=4 (0.3mm length, 25μm Dia Au wire)
Drain n=4 (0.3mm length, 25μm Dia Au wire)
Source n=4 (0.3mm length, 25μm Dia Au wire)

CHIP OUTLINE



Source electrodes are electrically insulated from the bottom of the chip (PHS)

Die Thickness: 60±20μm