PF0025 Series

Product Preview

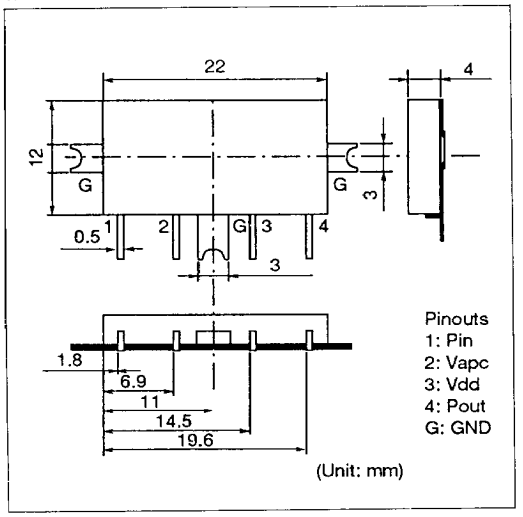
MOS FET Power Amplifier Module for Handy Mobile Phone

PF0025: For AMPS 824–849MHz
PF0026: For NMT-900 890–915MHz
PF0027: For E-TACS 872–905MHz

■ FEATURES

- Surface mounted small package 1cc, 3g
- Low voltage operation 6V (PF0026: 7.5V)
- Low power control current 300 μA
- High stability load VSWR ≥ 20

■ OUTLINE DRAWING



■ ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)

Item	Symbol	Rating	Unit
Supply Voltage	V_{DD}	12	V
Supply Current	I_{DD}	2	A
APC Voltage	V_{APC}	± 8	V
Input Power	P_{in}	20	mW
Operating Case Temperature	$T_{C(op)}$	−30 ~ +100	°C
Storage Temperature	T_{stg}	−30 ~ +100	°C

The absolute maximum ratings are limiting values, to be applied individually, beyond which the device may be permanently damaged. Functional operation under any of these conditions is not guaranteed. Exposing a circuit to its absolute maximum rating for extended periods of time may affect the device's reliability.

■ ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Item	Symbol	Test Condition		min.	typ.	max.	Unit
		PF0025/27	PF0026				
Drain Cutoff Current	I_{DS}	V_{DD} = 12V, V_{apc} = 0V		—	—	100	μA
Total Efficiency	η_T	V_{DD} = 6V, P_{in} = 1mW, P_{out} = 1.2W, Z_{in} = Z_{out} = 50Ω	V_{DD} = 7.5V, P_{in} = 1mW, P_{out} = 2W, Z_{in} = Z_{out} = 50Ω	—	45	—	%
2nd Harmonic Distortion	2nd H.D.			—	—	−30	dB
3rd Harmonic Distortion	3rd H.D.			—	—	−30	dB
Input VSWR	VSWR(in)			—	—	3	—
Output VSWR	VSWR(out)			—	2	—	—
Stability	—	V_{DD} = 6V, P_{in} = 1mW, P_{out} = 1.2W	V_{DD} = 7.5V, P_{in} = 1mW, P_{out} = 2W	No Parastic Oscillation			—
		Output VSWR = 20 All Phases, t = 20 sec					

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