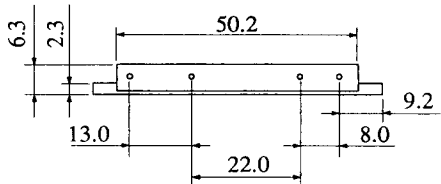
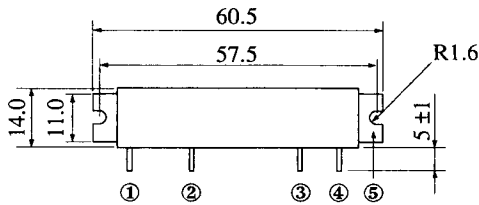


PF0010 Series

MOS FET POWER AMPLIFIER

FEATURES

- Include Input and Output Matching Circuit
- Easy to Control Output Power
- Superior to Stability at Load Mismatching

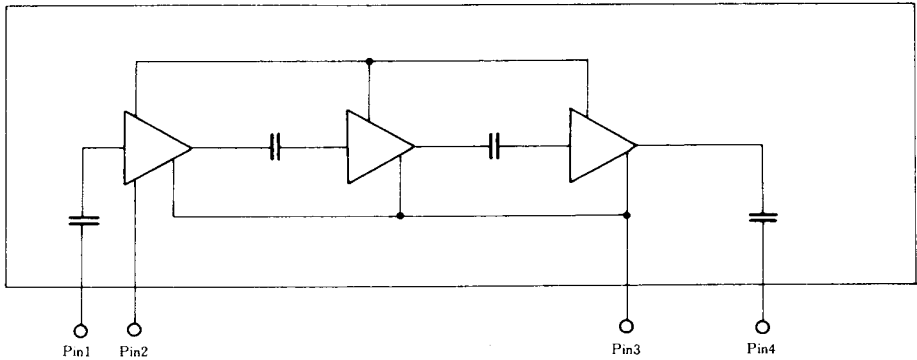


- ① Pin
 - ② V_{APC}
 - ③ V_{DD}
 - ④ Pout
 - ⑤ GND
- (Dimensions in mm)

ORDERING INFORMATION

Type No.	Operating Frequency	Application
PF0010	820 to 850 MHz	AMPS
PF0011	890 to 915 MHz	NMT900
PF0012	872 to 905 MHz	E-TACS
PF0014	915 to 945 MHz	N-TACS

BLOCK DIAGRAM



PF0010 Series

■ ABSOLUTE MAXIMUM RATINGS ($T_a = 25^{\circ}\text{C}$)

Item	Symbol	Rating	Unit
Supply Voltage	V_{DD}	17	V
Maximum Circuit Current	I_D	3.0	A
APC Voltage	V_{APC}	8	V
Maximum Input Power	P_{in}	20	mW
Operating Maximum Case Temperature	$T_{c(op)}$	$-40 \sim +100$	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	$-45 \sim +125$	$^{\circ}\text{C}$

■ ELECTRICAL CHARACTERISTICS ($T_a = 25^{\circ}\text{C}$)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Drain Cutoff Current	I_{DS}	$V_{DD1} = V_{DD2} = 17\text{V}$, $V_{APC} = 0$	—	—	500	μA
Total Efficiency	η_T	$f = 820, 850\text{MHz}$, $P_{in} = 2\text{mW}$,	35	40	—	%
2nd Harmonic Distortion	2nd H.D.	$V_{DD} = 12.5\text{V}$,	—	50	30	dB
3rd Harmonic Distortion	3rd H.D.	$P_{out} = 6\text{W}$ (at APC Control)	—	50	30	dB
Input VSWR	VSWR(in)	$Z_{in} = Z_{out} = 50\Omega$	—	1.5	3.0	—
Output VSWR	VSWR(out)		—	1.5	—	—
Stability	—	$V_{DD} = 12.5\text{V}$, $P_{in} = 2\text{mW}$, $f = 820\text{MHz}$, $P_{out} = 6\text{W}$ (at APC Control), $R_s = 50\Omega$, Output VSWR $\neq \infty$ All Phase, $t = 20\text{sec}$	No Parastic Oscillation			—