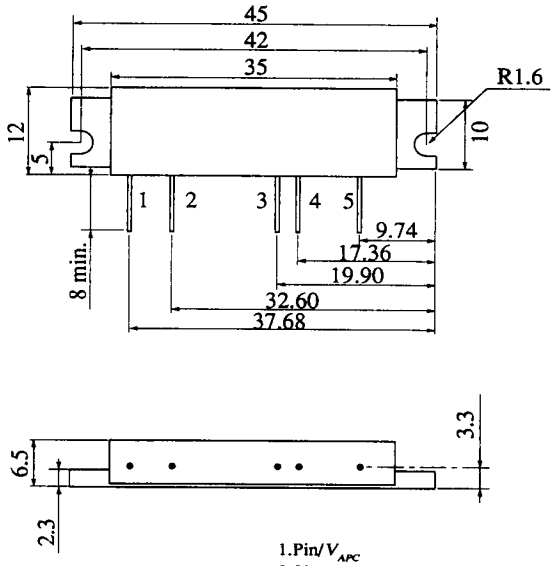
PF0015B Series

MOS FET POWER AMPLIFIER

■ FEATURES

- Small Package 12 × 45 × 6.5 mm³
- Low Voltage Operation 6V
- Low Power Control Current 300μA
- Good Stability of Load Change Load VSWR ≥ 20

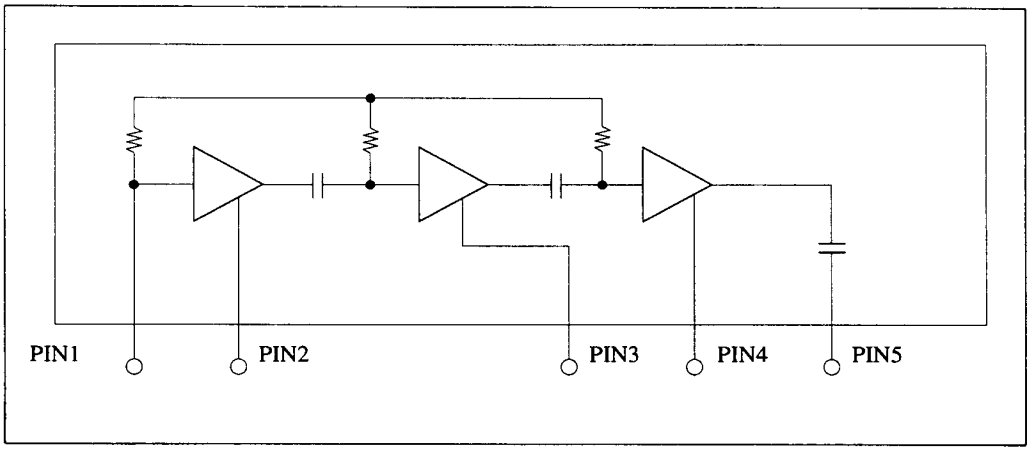


1.Pin/V_{APC}
2.V_{DD1}
3.V_{DD2}
4.V_{DD3}
5.Pout
(Unit: mm)

■ ORDERING INFORMATION

Type No.	Operating Frequency	Application
PF0015B	824 to 849 MHz	AMPS
PF0016B	890 to 915 MHz	NMT900
PF0017B	872 to 905 MHz	E-TACS

■ BLOCK DIAGRAM



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■ABSOLUTE MAXIMUM RATINGS (Ta = 25℃)

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	℃
Storage Temperature	T_{stg}	−30～+100	℃

■ELECTRICAL CHARACTERISTICS (Ta = 25℃)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Drain Cutoff Current	I_{DS}	V_{DD1} = V_{DD2} = V_{DD3} =12V, V_{APC} = 0V	−	−	100	μA
Total Efficiency	η_T	f = 824, 849MHz,	35	40	−	%
2nd Harmonic Distortion	2nd H. D.	P_{in} = 1mW,	−	−40	−30	dB
3rd Harmonic Distortion	3rd H. D.	V_{DD1} = V_{DD2} = V_{DD3} = 6V,	−	−50	−30	dB
Input VSWR	VSWR (in)	P_{out} = 1.2W (at APC Control),	−	1.8	3	−
Output VSWR	VSWR (out)	Z_{in} = Z_{out} = 50Ω	−	2	−	−
Stability	−	V_{DD1} = V_{DD2} = V_{DD3} = 6V, P_{in} = 1mW, f = 824MHz, R_g = 50Ω, P_{out} = 1.2W (at APC Control) Output VSWR = 20 All Phases, t = 20sec	No Parastic Oscillation			−

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