

**ELECTROSTATIC SENSITIVE DEVICE**  
OBSERVE HANDLING PRECAUTIONS

**MITSUBISHI RF POWER MOS FET**

# RD16HHF1

**Silicon MOSFET Power Transistor 30MHz,16W**

## DESCRIPTION

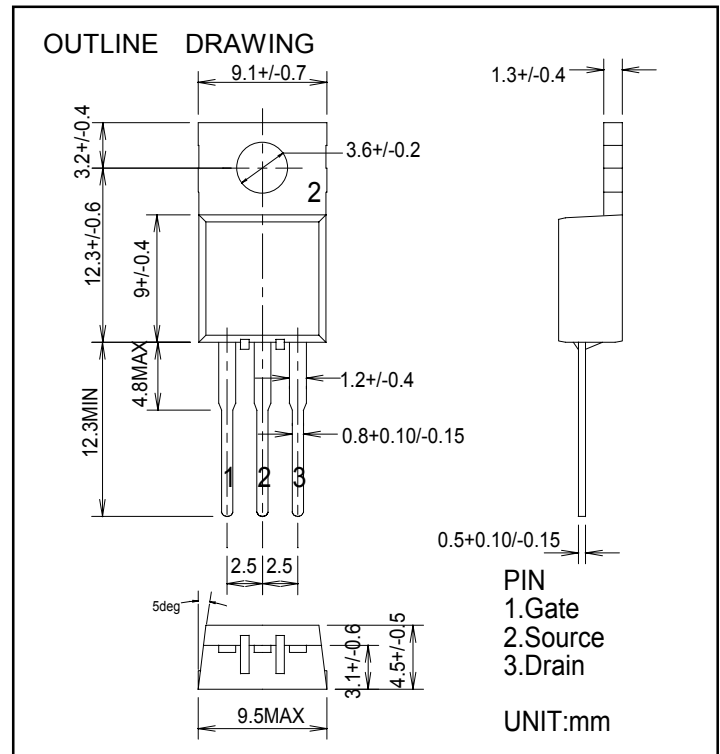
RD16HHF1 is a MOS FET type transistor specifically designed for HF RF power amplifiers applications.

## FEATURES

- High power gain:  
Pout>16W, Gp>16dB @Vdd=12.5V,f=30MHz

## APPLICATION

For output stage of high power amplifiers in HF band mobile radio sets.



## ABSOLUTE MAXIMUM RATINGS

(Tc=25°C UNLESS OTHERWISE NOTED)

SYMBOL	PARAMETER	CONDITIONS	RATINGS	UNIT
Vdss	Drain to source voltage	Vgs=0V	50	V
Vgss	Gate to source voltage	Vds=0V	+/- 20	V
Pch	Channel dissipation	Tc=25°C	56.8	W
Pin	Input power	Zg=Zl=50Ω	0.8	W
ID	Drain to source current	-	5	A
Tch	Channel temperature	-	150	°C
Tstg	Storage temperature	-	-40 to +150	°C
Rth j-c	Thermal resistance	junction to case	2.2	°C/W

Note 1: Above parameters are guaranteed independently.

## ELECTRICAL CHARACTERISTICS (Tc=25°C , UNLESS OTHERWISE NOTED)

SYMBOL	PARAMETER	CONDITIONS	LIMITS			UNIT
			MIN	TYP	MAX.	
Idss	Zero gate voltage drain current	VDS=17V, VGS=0V	-	-	10	uA
Igss	Gate to source leak current	VGS=10V, VDS=0V	-	-	1	uA
VTH	Gate threshold voltage	VDS=12V, Ids=1mA	1.7	-	4.7	V
Pout	Output power	VDD=12.5V, Pin=0.4W,	16	19	-	W
ηD	Drain efficiency	f=30MHz, Idq=0.5A	55	65	-	%
	Load VSWR tolerance	VDD=15.2V,Po=16W(Pin Control) f=30MHz,Idq=0.5A,Zg=50Ω Load VSWR=20:1(All Phase)	No destroy			-

Note : Above parameters , ratings , limits and conditions are subject to change.