HG Semiconductors

HG RF POWER TRANSISTOR

MRF475

ROHS Compliance.Silicon NPN POWER TRANSISTOR

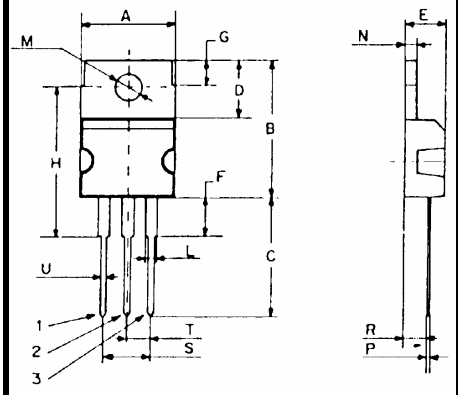
DESCRIPTION:

The **HG MRF475** is Designed for 13.6 V FM Large-Signal Amplifier Applications to 30 MHz.

MAXIMUM RATINGS

I_C	4.0 A
V_{CE}	18 V
V_{CB}	48 V
P_{DISS}	10 W @ T_C = 25 °C
T_{STG}	-65 °C to +150 °C
T_J	-65 °C to +150 °C
θ_{JC}	12.5 °C/W

PACKAGE STYLE TO-220AB (COMMON EMITTER)



1 = BASE 2 = COLLECTOR
3 = EMITTER TAB = COLLECTOR

	DIMENSIONS			
	mm		inches	
	min	max	min	max
A	10	10.4	0.393	0.409
B	15.2	15.9	0.598	0.626
C	12.7	13.7	0.500	0.539
D	6.2	6.6	0.244	0.260
E	4.4	4.6	0.173	0.181
F	3.5	5.5	0.137	0.216
G	2.65	2.95	0.104	0.116
H	17.6 typ.		0.692 typ.	
L	1.14	1.7	0.044	0.067
M	3.75	3.85	0.147	0.151
N	1.23	1.32	0.048	0.051
P	0.41	0.64	0.016	0.025
R	2.4	2.72	0.094	0.107
S	4.95	5.15	0.194	0.203
T	2.4	2.7	0.094	0.106
U	0.61	0.94	0.024	0.037

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I_C = 20 mA	18			V
BV_{CES}	I_C = 50 mA	48			V
BV_{EBO}	I_E = 5.0 mA	4.0			V
I_{CBO}	V_{CB} = 25 V			1.0	mA
h_{FE}	V_{CE} = 5.0 V I_C = 500 mA	30	60		---
C_{ob}	V_{CB} = 13.6 V f = 1.0 MHz		125	145	pF
G_{PE} η IMD	V_{CC} = 13.6 V I_{CQ} = 20 mA P_{out} = 12 W (PEP) f_1 = 30 MHz f_2 = 30.001 MHz	10 40	12	 -30	dB % dB

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