MITSUBISHI
ELECTRIC CO.

RF POWER TRANSISTOR
2SC1964

GENERAL DISCRITION

MITSUBISHI 2SC1964 is a silicon NPN epitaxial planar type transistor specifically designed for power amplifiers operating in HF band.

FEATURES

1. High Gain: Gpe=8.8dB(min.) @27MHz, 12V, Pin=0.4W, Ic=0.42A.
2. The ability to withstand infinite VSWR at all phase angles when operated rated output power (100% AM) and V_{CC}=16V.
3. IMD: -30dB or better @ Po=5W, Vcc=12V.

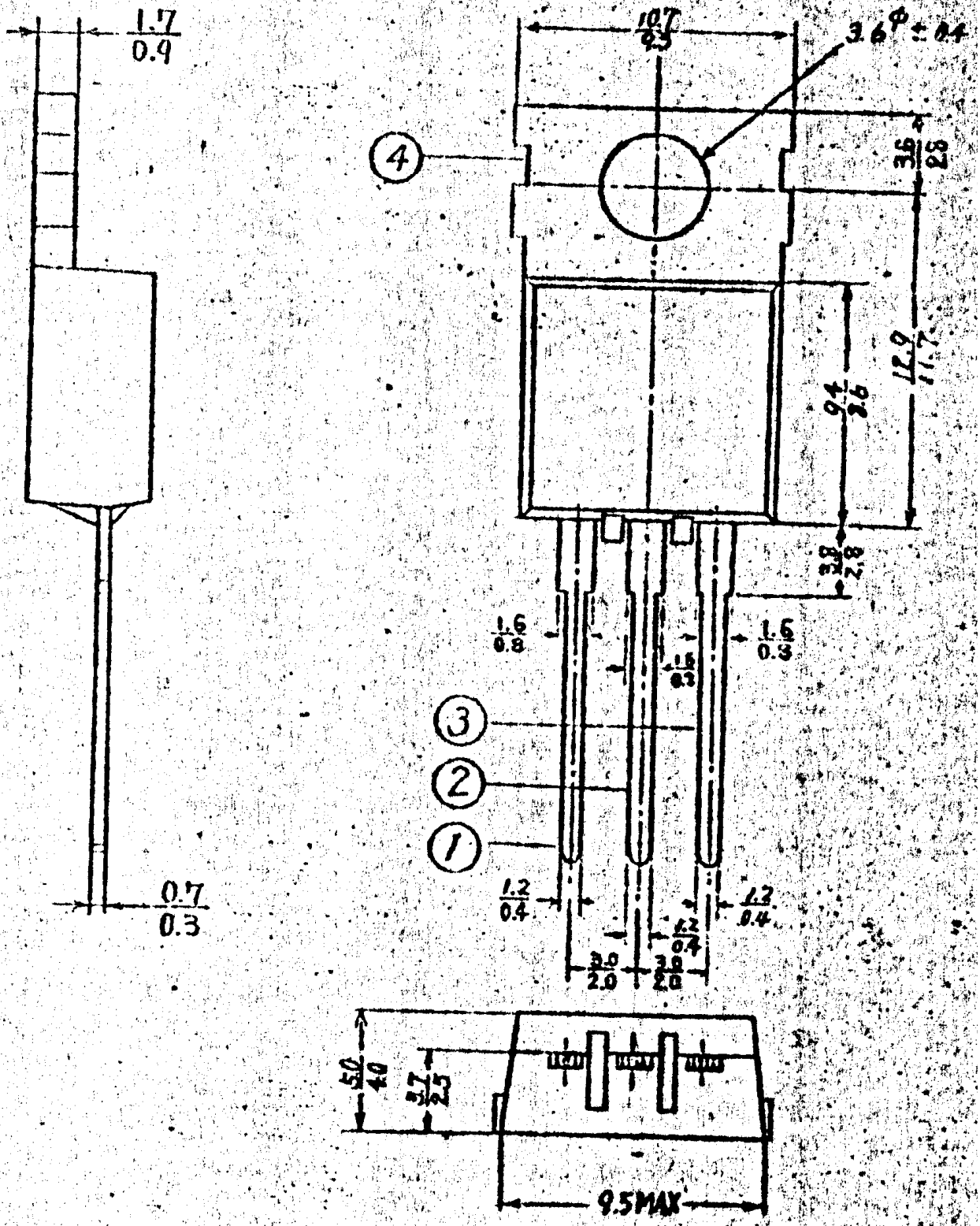
APPLICATION

Especially suitable for the output stage of 27MHz AM 5W tranceiver sets.

MITSUBISHI ELECTRIC CORPORATION IN JAPAN

TRANSISTOR SPEC. SHEET	DRAWN									
	APPROVED									
Type	2SC1964									
Application	For RF Power Amplifiers									
Structure	Silicon NPN Epitaxial Planar Type Transistor									
Outline	Fig. 1									
	V_{CBO}	V_{EBO}	V_{CEO}	I_C	$I_{\_\_}$	P_C	$P_{\_\_}$	T_j	T_{stg}	T_a
			$R_{BE} = \infty$			$T_c = 50\ ^\circ C$				25 / 75 °C
Max. Ratings	80 V	4 V	40 V	3.5A	___A	10 W	___W	+150 °C	−65 ~ +150 °C	

Caracteristics	Symbol	Test Conditions	Limits Min.	Typ.	Max.	Unit
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = 1mA	80			V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = 1mA	4			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 10mA, $R_{BE} = \infty$	40			V
Collector Cutoff Current	I_{CBO}	V_{CB} = 30V			500	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 3V			500	μA
DC Forward Current Transfer Ratio	h_{FE}	V_{CE} = 10V, I_C = 0.1A	10	50	180	-
Output Power	P_o	Vcc=12V, f=27MHz, Pin=0.4W, $I_C \leq$ 420mA	3	3.4		W



1 BASE

2 COllector

3 Emitter

4 Collector

All denensions are shown in mm