GENERAL DISCRIPTION

2SC2312 is a silicon NPN epitaxial planar type transistor specifically designed for linear amplifiers operating in HF band.

FEATURES

1. High Output, High Gain : Po=17W, Gpe=10.5dB; @27MHz, 12V
2. Low IMD. 3rd; -30dB(TYP), 11th; -62dB(TYP), and higher order IMD bellow than -65dB. @ Vcc=13.5V, Po=14W
3. Convenient plastic molded package.

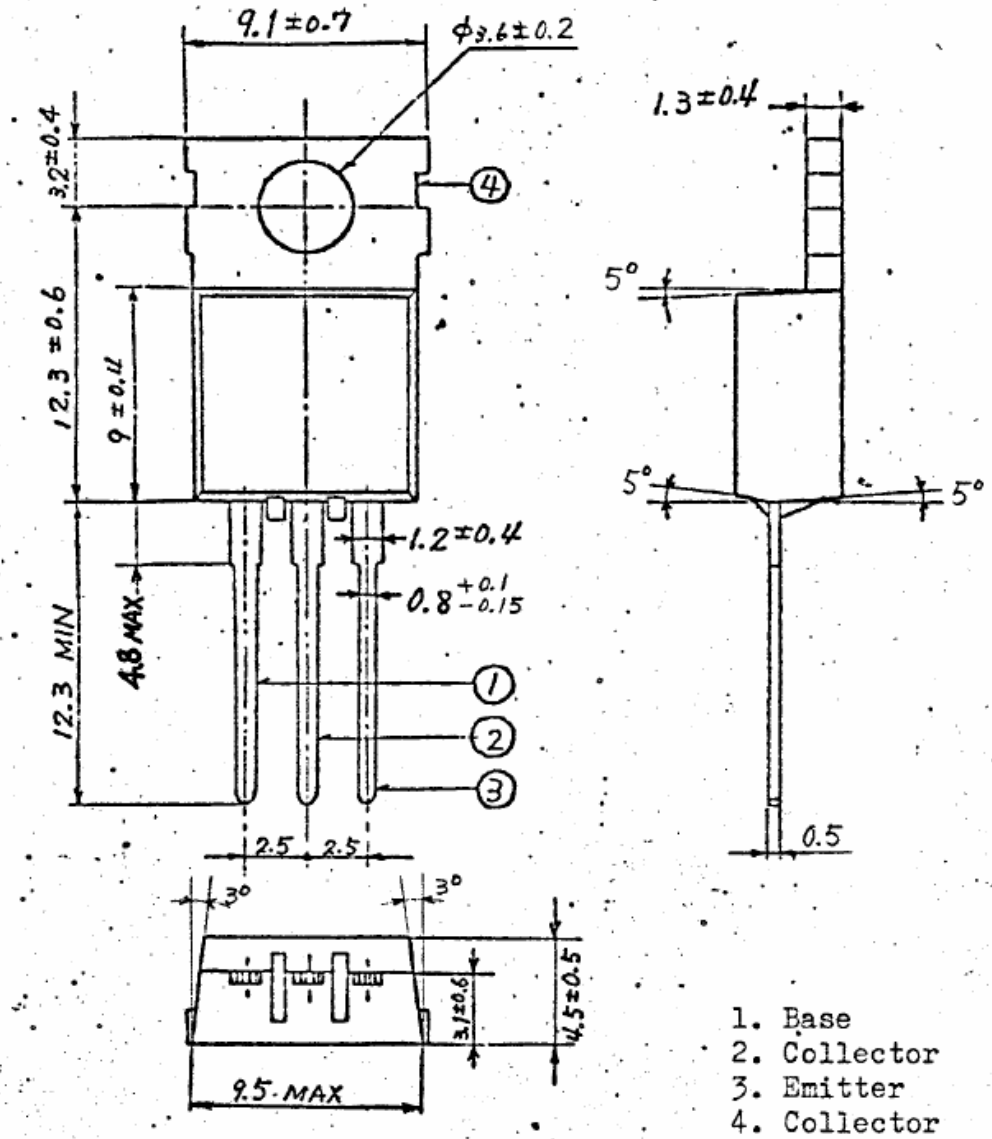
APPLICATIONS

Especially suitable for the output stage of 27MHz 4W AM/ 12W SSB transceiver sets.

Type	2SC2312									
Application	RF - Power Amplification									
Structure	Silicon NPN Epitaxial Planar Type									
Outline	See Fig. 1									
	V_{CBO}	V_{EBO}	V_{CEO}	I_C	$I_{\_\_}$	P_C	$P_{\_\_}$	T_j	T_{stg}	Ta
			RBE=∞			Tc= 25°C				25 ±3 °C
Max. Ratings	60 V	5 V	20 V	6 A	__A	25W	__W	+150°C	-55~+150°C	

Caracteristics	Symbol	Test Conditions	Limits Min.	Typ.	Max.	Unit
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = 5mA	5			V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = 1mA	60			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 10mA	20			V
Collector to Cutoff Current	I_{CBO}	V_{CB} = 30V			500	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 4V			100	μA
DC Forward Current Transfer Ratio	h_{FE}	V_{CE} = 12V, I_C = 100mA	20	50	180	-
Output Power	Po	V_{CC} = 12V, f = 27MHz	17	18.5		W
Collector Efficiency	ηc	Pin = 1.5W	60	70		%

Fig. 1 Outline Drawing



All dimensions in mm