2SC2319

SILICON NPN EPITAXIAL PLANAR TYPE

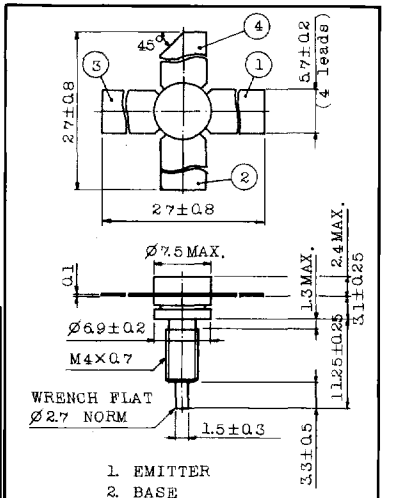
HIGH POWER AMPLIFIER FOR CATV APPLICATIONS.

FEATURES:

. Wide Band and High Gain for Class A Amplifier.

. Excellent Cross Modulation Characteristics.

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	2-8G1A

Weight : 1.9g

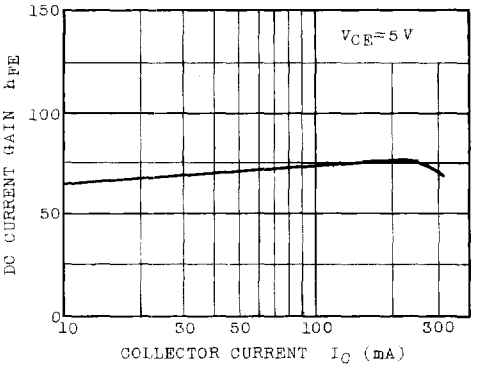
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	15	V
Emitter-Base Voltage	V_{EBO}	3.5	V
Collector Current	I_C	350	mA
Collector Power Dissipation (Tc=25 °C)	P_C	5	W
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_{stg}	-65 ~ 175	°C

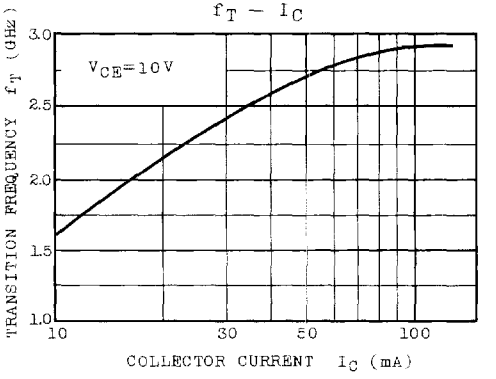
ELECTRICAL CHARACTERISTICS (Tc=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CB}=30V, I_E=0	-	-	1.0	μA
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=1mA, I_E=0	40	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=10mA, I_B=0	15	-	-	V
DC Current Gain	h_{FE}	V_{CE}=5V, I_C=100mA	30	-	180	-
Collector Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz	-	3.5	4.2	pF
Transition Frequency	f_T	I_C=10V, I_C=90mA	2.2	2.9	-	GHz
Power Gain	$G_{pe(1)}$	V_{CE}=10V, I_C=90mA f=250MHz	14	16	-	dB
	$G_{pe(2)}$	V_{CE}=10V, I_C=90mA f=800MHz	-	8	-	dB

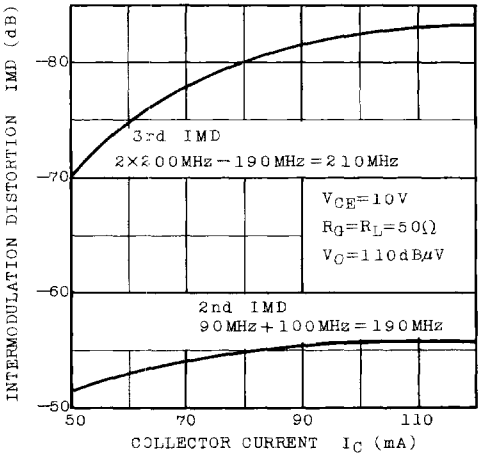
h_{FE} – I_C



f_T – I_C



IMD – I_C



P_C – Ta