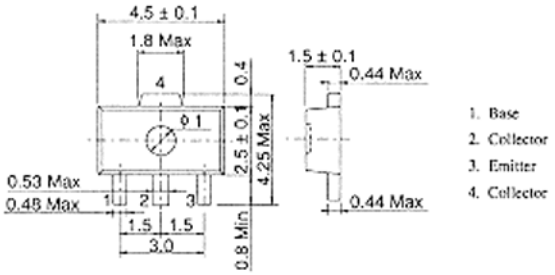
HITACHI

2SC3338

SILICON NPN EPITAXIAL

UHF/VHF WIDE BAND AMPLIFIER

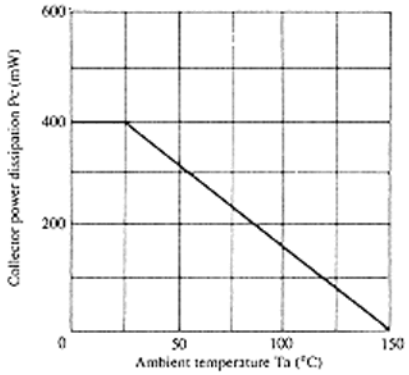


(UPAK)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SC3338	Unit
Collector to base voltage	V_{CBO}	20	V
Collector to emitter voltage	V_{CEO}	12	V
Emitter to base voltage	V_{EBO}	3	V
Collector current	I_C	50	mA
Collector power dissipation	P_C	400	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	I_C = 10μA, I_E = 0	20	—	—	V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 1mA, R_{BE} = ∞	12	—	—	V
Emitter cutoff current	I_{EBO}	V_{EB} =3V, I_C = 0	—	—	10	μA
Collector cutoff current	I_{CBO}	V_{CB} =15V, I_C = 0	—	—	0.5	μA
DC current transfer ratio	h_{FE}	V_{CE} = 5V, I_C = 20mA	30	90	200	
Collector output capacitance	C_{ob}	V_{CB} = 5V, I_E = 0, f = 1MHz	—	1.0	1.5	pF
Gain bandwidth product	f_T	V_{CE} = 5V, I_C = 20mA	3.5	4.5	—	GHz
Power gain	PG	V_{CE} = 5V, I_C = 20mA, f = 900MHz	—	8.2	—	dB
Noise figure	NF	V_{CE} = 5V, I_C = 5mA, f = 900MHz	—	2.0	—	dB

* Marking is "AR".

■ See characteristic curves of 2SC3126.