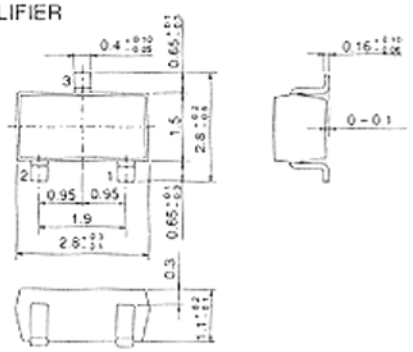
HITACHI

2SC4366

SILICON NPN EPITAXIAL

LOW FREQUENCY AMPLIFIER



1. Emitter
2. Base
3. Collector

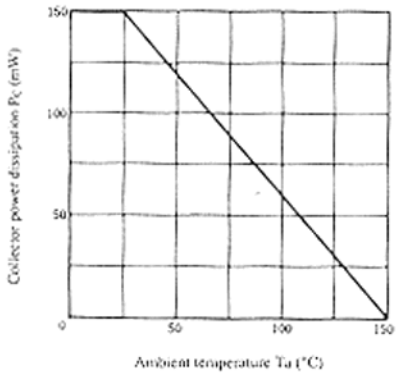
(Dimensions in mm)

(MPAK)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SC4366	Unit
Collector to base voltage	V_{CBO}	60	V
Collector to emitter voltage	V_{CEO}	50	V
Emitter to base voltage	V_{EBO}	15	V
Collector current	I_C	300	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

MAXIMUM COLLECTOR DISSIPATION CURVE

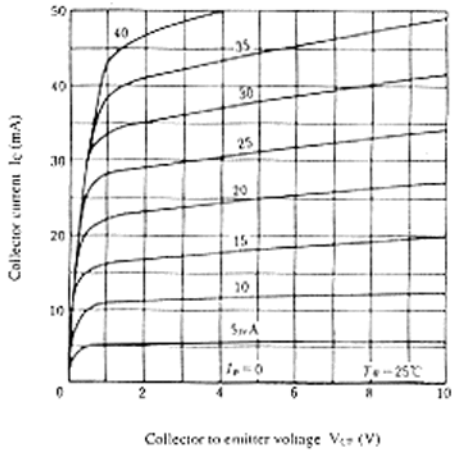


■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

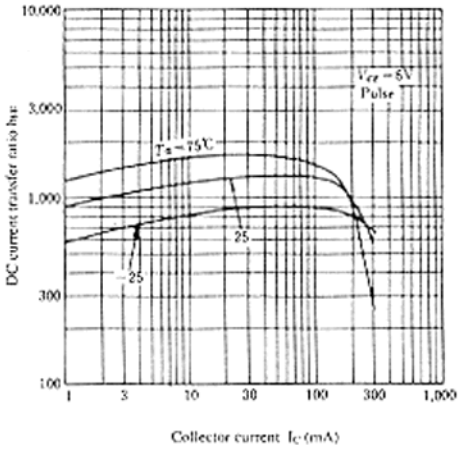
Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	I_C = 10μA, I_E = 0	60	—	—	V
Collector to emitter breakdown voltage	$I_{(BR)CEO}$	I_C = 1mA, R_{BE} = ∞	50	—	—	V
Emiter to base breakdown voltage	$I_{(BR)EBO}$	I_E = 10μA, I_C = 0	15	—	—	V
Collector cutoff current	I_{CBO}	V_{CB} = 50V, I_E = 0	—	—	1	μA
Base to emitter voltage	V_{BE}	V_{CE} = 6V, I_C = 1mA	—	—	0.75	V
DC current transfer ratio	h_{FE1}	V_{CE} = 6V, I_C = 100mA (pulse)	800	—	2000	
	h_{FE2}	V_{CE} = 6V, I_C = 1mA	500	—	—	
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = 300mA, I_B = 30mA (pulse)	—	—	0.3	V

* Marking is [ZH–].

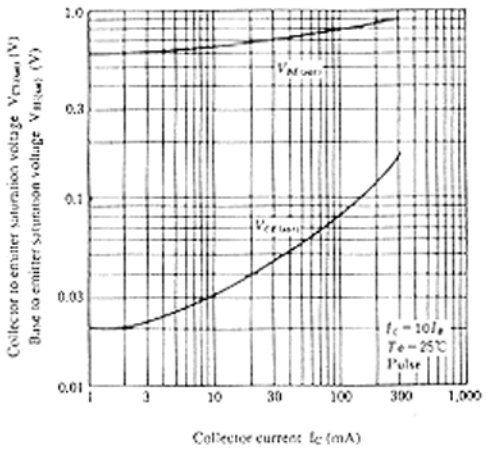
TYPICAL OUTPUT CHARACTERISTICS



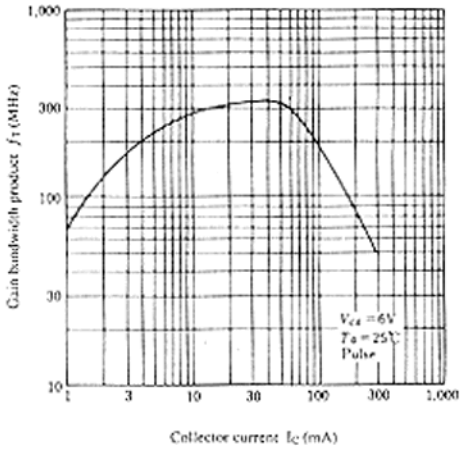
DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT



SATURATION VOLTAGE VS. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT VS. COLLECTOR CURRENT



COLLECTOR OUTPUT CAPACITANCE VS. COLLECTOR TO BASE VOLTAGE