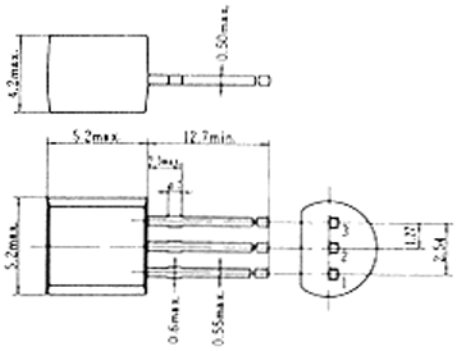
2SC1214

SILICON NPN EPITAXIAL

LOW FREQUENCY AMPLIFIER

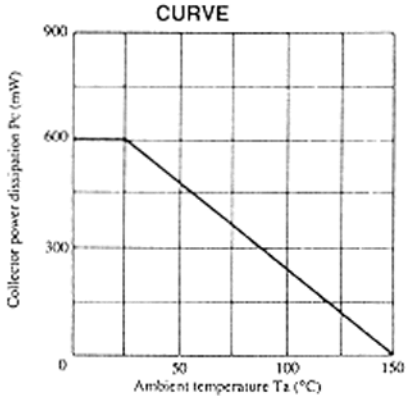


(JEDEC TO-92)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SC1214	Unit
Collector to base voltage	V_{CBO}	50	V
Collector to emitter voltage	V_{CEO}	50	V
Emitter to base voltage	V_{EBO}	4	V
Collector current	I_C	500	mA
Collector power dissipation	P_C	600	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	50	—	—	V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 1mA, R_{BE} = ∞	50	—	—	V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	I_E = 10μA, I_C = 0	4	—	—	V
Collector cutoff current	I_{CBO}	V_{CB} = 20V, I_E = 0	—	—	0.5	μA
DC current transfer ratio	h_{FE}*	V_{CE} = 3V, I_C = 10mA	60	—	320	
	h_{FE}	V_{CE} = 3V, I_C = 500mA (pulse test)	10	—	—	
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = 150mA, I_B = 15mA	—	0.2	0.6	V
Base to emitter voltage	V_{BE}	V_{CE} = 3V, I_C = 10mA	—	0.64	—	V

* The 2SC1214 is grouped by h_{FE} as follows.

B	C	D
60 to 120	100 to 200	160 to 320

■ See characteristic curves of 2SC1213.