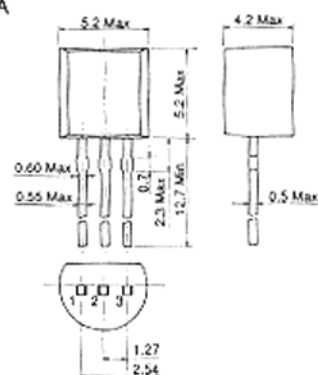


2SC1213, 2SC1213A

SILICON NPN EPITAXIAL

LOW FREQUENCY AMPLIFIER

Complementary pair with 2SA673 and 2SA673A



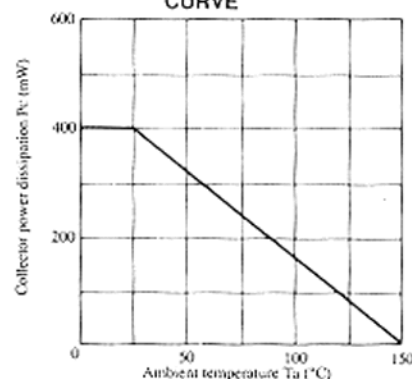
1. Emitter
2. Collector
3. Base
(Dimensions in mm)

(JEDEC TO-92)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SC1213	2SC1213A	Unit
Collector to base voltage	V _{CB0}	35	50	V
Collector to emitter voltage	V _{CE0}	35	50	V
Emitter to base voltage	V _{EB0}	4	4	V
Collector current	I _C	500	500	mA
Collector power dissipation	P _C	400	400	mW
Junction temperature	T _J	150	150	°C
Storage temperature	T _{stg}	-55 to +150	-55 to +150	°C

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

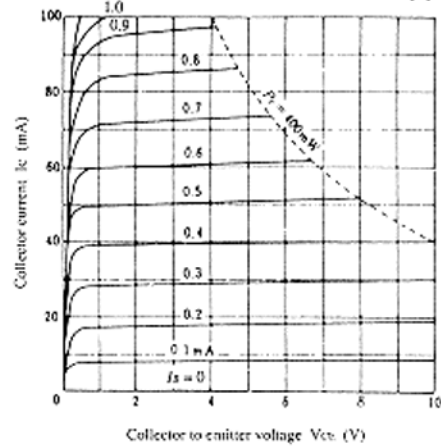
Item	Symbol	Test Condition	2SC1213			2SC1213A			Unit
			min.	typ.	max.	min.	typ.	max.	
Collector to base breakdown voltage	V _{(BR)CBO}	I _C = 10μA, I _E = 0	35	—	—	50	—	—	V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _C = 1mA, R _{BE} = ∞	35	—	—	50	—	—	V
Emitter to base breakdown voltage	V _{(BR)EBO}	I _E = 10μA, I _C = 0	4	—	—	4	—	—	V
Collector cutoff current	I _{CBO}	V _{CB} = 20V, I _E = 0	—	—	0.5	—	—	0.5	μA
DC current transfer ratio	h _{FE} *	V _{CE} = 3V, I _C = 10mA	60	—	320	60	—	320	
	h _{FE}	V _{CE} = 3V, I _C = 500mA**	10	—	—	10	—	—	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 150mA, I _B = 15mA**	—	0.2	0.6	—	0.2	0.6	V
Base to emitter voltage	V _{BE}	V _{CE} = 3V, I _C = 10mA	—	0.64	—	—	0.64	—	V

* The 2SC1213 and 2SC1213A are grouped by h_{FE} as follows.

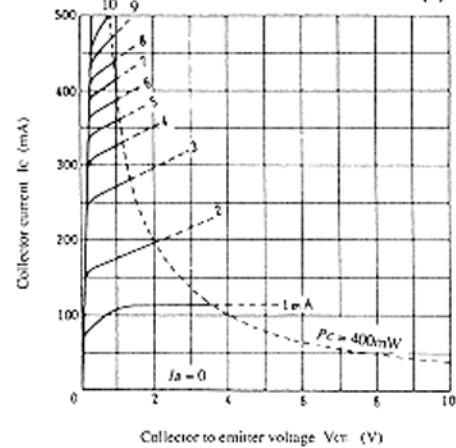
** Pulse Test

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

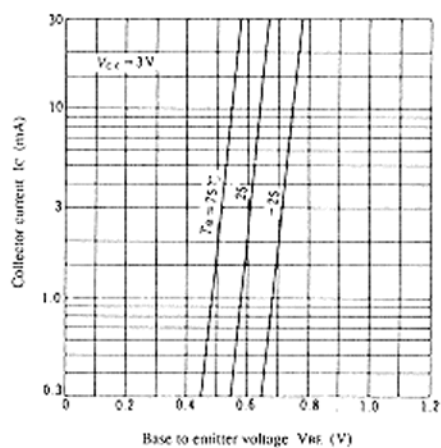
TYPICAL OUTPUT CHARACTERISTICS (1)



TYPICAL OUTPUT CHARACTERISTICS (2)



TYPICAL TRANSFER CHARACTERISTICS



DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT

