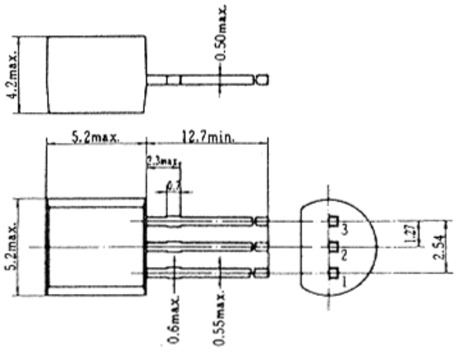
HITACHI

2SA673, 2SA673A

SILICON PNP EPITAXIAL

LOW FREQUENCY AMPLIFIER
Complementary pair with 2SC1213 and 2SC1213A



1. Emitter
2. Collector
3. Base

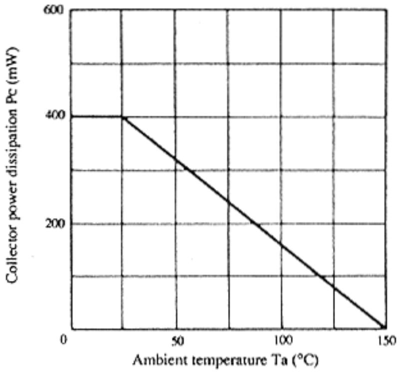
(Dimensions in mm)

(JEDEC TO-92)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SA673	2SA673A	Unit
Collector to base voltage	V_{CBO}	–35	–50	V
Collector to emitter voltage	V_{CEO}	–35	–50	V
Emitter to base voltage	V_{EBO}	–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	2SA673			2SA673A			Unit
			min.	typ.	max.	min.	typ.	max.	
Collector to base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A$, $I_E = 0$	–35	—	—	–50	—	—	V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA$, $R_{BE} = \infty$	–35	—	—	–50	—	—	V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A$, $I_C = 0$	–4	—	—	–4	—	—	V
Collector cutoff current	I_{CBO}	$V_{CB} = -20V$, $I_E = 0$	—	—	–0.5	—	—	–0.5	μA
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -150mA$, $I_B = -15mA$**	—	–0.2	–0.6	—	–0.2	–0.6	V
DC current transfer ratio	h_{FE}*	$V_{CE} = -3V$, $I_C = -10mA$	60	—	320	60	—	320	
DC current transfer ratio	h_{FE}	$V_{CE} = -3V$, $I_C = -500mA$**	10	—	—	10	—	—	
Base to emitter voltage	V_{BE}	$V_{CE} = -3V$, $I_C = -10mA$	—	–0.64	—	—	–0.64	—	V

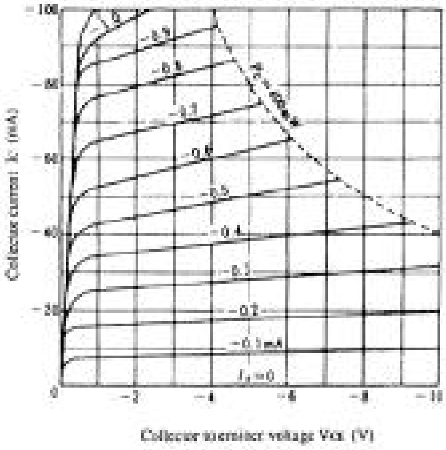
* The 2SA673 and 2SA673A are grouped by h_{FE} as follows.

** Pulse Test

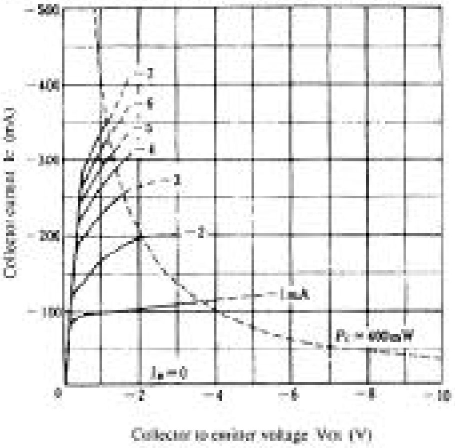
B	C	D
60 to 120	100 to 200	160 to 320

2SA673, 2SA673A

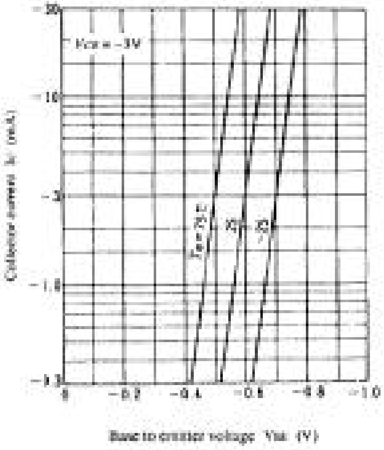
TYPICAL OUTPUT CHARACTERISTICS (1)



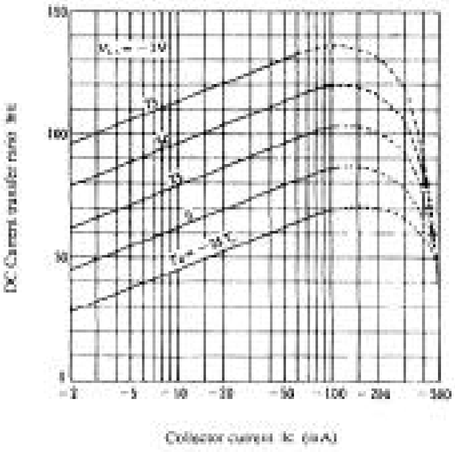
TYPICAL OUTPUT CHARACTERISTICS (2)



TYPICAL TRANSFER CHARACTERISTICS



DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT VS. COLLECTOR CURRENT