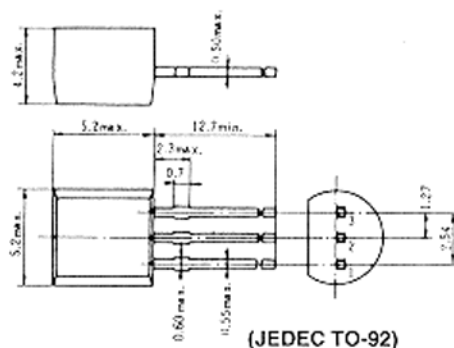


2SC2853, 2SC2854

SILICON NPN EPITAXIAL

LOW FREQUENCY AMPLIFIER

Complementary pair with 2SA1188 and 2SA1189

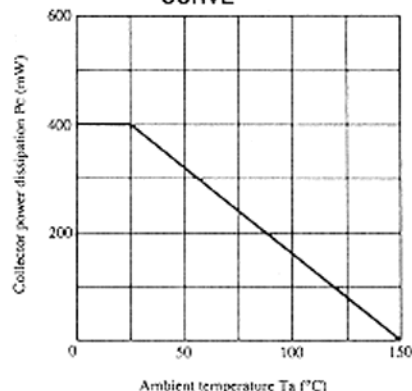


1. Emitter
 2. Collector
 3. Base
- (Dimensions in mm)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SC2853	2SC2854	Unit
Collector to base voltage	V _{CB0}	90	120	V
Collector to emitter voltage	V _{CE0}	90	120	V
Emitter to base voltage	V _{EB0}	5	5	V
Collector current	I _C	100	100	mA
Emitter current	I _E	-100	-100	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	2SC2853			2SC2854			Unit
			min.	typ.	max.	min.	typ.	max.	
Collector to base breakdown voltage	V _{(BR)CB0}	I _C = 10μA, I _E = 0	90	—	—	120	—	—	V
Collector to emitter breakdown voltage	V _{(BR)CE0}	I _C = 1mA, R _{BE} = ∞	90	—	—	120	—	—	V
Emitter to base breakdown voltage	V _{(BR)EB0}	I _E = 10μA, I _C = 0	5	—	—	5	—	—	V
Collector cutoff current	I _{CB0}	V _{CB} = 70V, I _E = 0	—	—	0.1	—	—	0.1	μA
Emitter cutoff current	I _{EB0}	V _{CB} = 2V, I _C = 0	—	—	0.1	—	—	0.1	μA
DC current transfer ratio	h _{FE} *	V _{CE} = 12V, I _C = 2mA**	250	—	800	250	—	800	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 10mA, I _B = 1mA**	—	0.05	0.10	—	0.05	0.10	V
Base to emitter saturation voltage	V _{BE(sat)}		—	0.7	1.0	—	0.7	1.0	V
Gain bandwidth product	f _r	V _{CE} = 6V, I _C = 10mA,	—	310	—	—	310	—	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f = 1MHz	—	3	—	—	3	—	pF

* The 2SC2853 and 2SC2854 are grouped by h_{FE} as follows.

** Pulse test

D	E
250 to 500	400 to 800

■ See characteristic curves of 2SC2855 and 2SC2856.