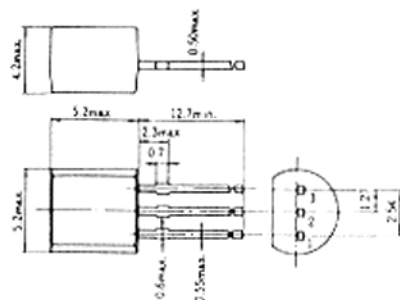


2SC2396, 2SC2543, 2SC2544

SILICON NPN EPITAXIAL

LOW FREQUENCY AMPLIFIER

Complementary pair with 2SA1025,
2SA1081 and 2SA1082



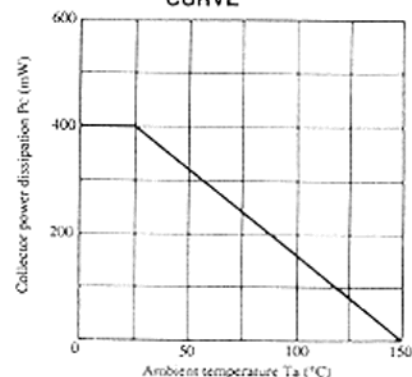
(JEDEC TO-92)

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

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SC2396	2SC2543	2SC2544	Unit
Collector to base voltage	V _{CB0}	60	90	120	V
Collector to emitter voltage	V _{CE0}	60	90	120	V
Emitter to base voltage	V _{EB0}	5	5	5	V
Collector current	I _C	100	100	100	mA
Emitter current	I _E	-100	-100	-100	mA
Collector power dissipation	P _C	400	400	400	mW
Junction temperature	T _J	150	150	150	°C
Storage temperature	T _{stg}	-55 to +150	-55 to +150	-55 to +150	°C

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	2SC2396			2SC2543			2SC2544			Unit
			min.	typ.	max.	min.	typ.	max.	min.	typ.	max.	
Collector to base breakdown voltage	V _{(BR)CBO}	I _C = 10μA, I _E = 0	60	—	—	90	—	—	120	—	—	V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _C = 1mA, R _{BE} = ∞	60	—	—	90	—	—	120	—	—	V
Emitter to base breakdown voltage	V _{(BR)EBO}	I _E = 10μA, I _C = 0	5	—	—	5	—	—	5	—	—	V
Collector cutoff current	I _{CB0}	V _{CB} = 50V, I _E = 0	—	—	0.1	—	—	0.1	—	—	0.1	μA
Emitter cutoff current	I _{EB0}	V _{EB} = 2V, I _C = 0	—	—	0.1	—	—	0.1	—	—	0.1	μA
DC current transfer ratio	h _{FE}	V _{CE} = 12V, I _C = 2mA	250	—	1200	250	—	1300	250	—	800	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 10mA, I _B = 1mA	—	—	0.2	—	—	0.2	—	—	0.2	V
Base to emitter voltage	V _{BE}	V _{CE} = 12V, I _C = 2mA	—	0.6	—	—	0.6	—	—	0.6	—	V
Gain bandwidth product	f _T	V _{CE} = 12V, I _C = 2mA	—	90	—	—	90	—	—	90	—	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f = 1MHz	—	3.0	—	—	3.0	—	—	3.0	—	pF

* The 2SC2396, 2SC2543 and 2SC2544 are grouped by h_{FE} as follows.

	D	E	F
2SC2396, 2SC2543	250 to 500	400 to 800	600 to 1200
2SC2544	250 to 500	400 to 800	—

■ See characteristic curves of 2SC2545, 2SC2546 and 2SC2547.