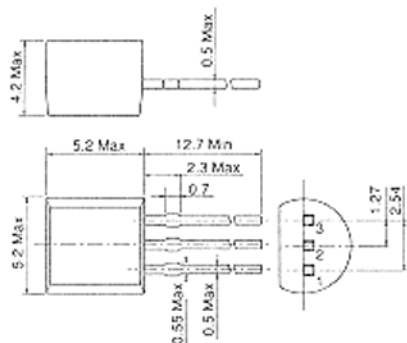


2SD1490

SILICON NPN EPITAXIAL

LOW FREQUENCY POWER AMPLIFIER

Complementary pair with 2SB1059



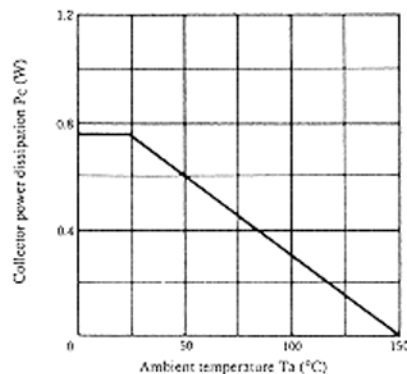
(JEDEC TO-92)

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

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SD1490	Unit
Collector to base voltage	V_{CBO}	70	V
Collector to emitter voltage	V_{CEO}	50	V
Emitter to base voltage	V_{EBO}	6	V
Collector current	I_C	1	A
Collector power dissipation	P_C	0.75	W
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	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	70	—	—	V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, R_{BE} = \infty$	50	—	—	V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	6	—	—	V
Collector cutoff current	I_{CBO}	$V_{CB} = 80V, I_E = 0$	—	—	1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = 6V, I_C = 0$	—	—	0.2	μA
DC current transfer ratio	h_{FE}^*	$V_{CE} = 2V, I_C = 0.1A$	100	—	500	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1A, I_B = 0.1A$	—	—	0.3	V
Gain bandwidth product	f_T	$V_{CE} = 2V, I_C = 10mA$	—	80	—	MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	—	20	—	pF

* The 2SD1490 is grouped by h_{FE} as follows.

B	C	D
100 to 200	160 to 320	250 to 500

■ See characteristic curves of 2SD789.