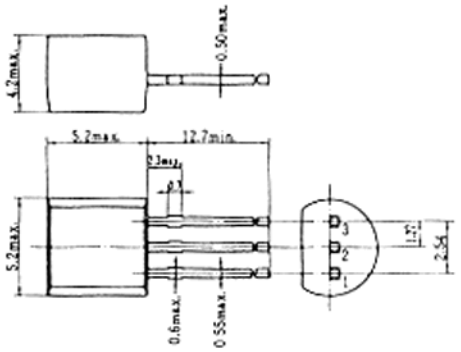
HITACHI

2SD1489

SILICON NPN EPITAXIAL

LOW FREQUENCY POWER AMPLIFIER
Complementary pair with 2SB1058



1. Emitter
2. Collector
3. Base

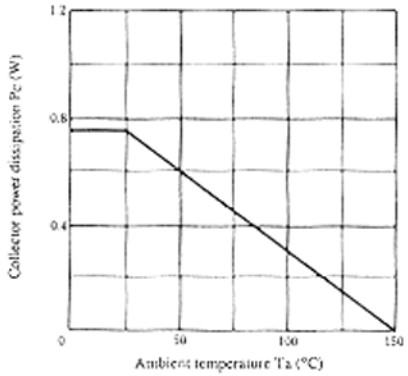
(Dimensions in mm)

(JEDEC TO-92)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SD1489	Unit
Collector to base voltage	V_{CBO}	20	V
Collector to emitter voltage	V_{CEO}	16	V
Emitter to base voltage	V_{EBO}	6	V
Collector current	I_C	2	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 = 10μA, I_E = 0	20	—	—	V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 1mA, R_{BE} = ∞	16	—	—	V
Emiter to base breakdown voltage	$V_{(BR)EBO}$	I_E = 10μA, I_C = 0	6	—	—	V
Collector cutoff current	I_{CBO}	V_{CB} = 16V, I_E = 0	—	—	2	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 2SD1489 is grouped by h_{FE} as follows.

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

■ See characteristic curves of 2SD787.