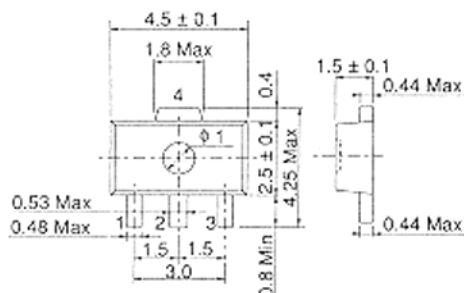


2SD1366A

SILICON NPN EPITAXIAL

LOW FREQUENCY POWER AMPLIFIER

Complementary pair with 2SB1000A



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

(UPAK)

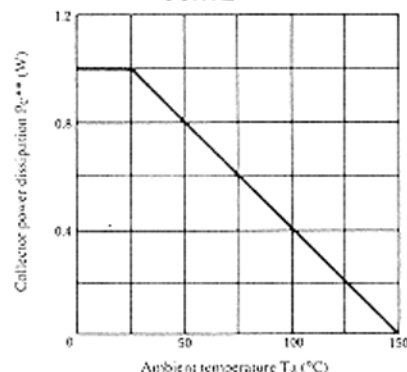
■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SD1366A	Unit
Collector to base voltage	V_{CBO}	30	V
Collector to emitter voltage	V_{CEO}	25	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_C	1	A
Collector peak current	$i_{C(peak)}$ *	1.5	A
Collector power dissipation	P_C^{**}	1	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

* PWS118ms, Duty cycle ≤20%.

** Value on the alumina ceramic, bo) at (12.5 × 20 × 0.7mm)

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	min.	typ.	max.	Unit
Collector to base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	30	—	—	V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, R_{BE} = \infty$	25	—	—	V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	5	—	—	V
Collector cutoff current	I_{CBO}	$V_{CB} = 20V, I_E = 0$	—	—	0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = 4V, I_C = 0$	—	—	0.1	μA
DC current transfer ratio	h_{FE}^{\dagger}	$V_{CE} = 2V, I_C = 0.5A, \text{Pulse}$	85	—	240	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 0.8A, I_B = 0.08A, \text{Pulse}$	—	0.15	0.3	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = 0.8A, I_B = 0.08A, \text{Pulse}$	—	0.9	1.0	V
Gain bandwidth product	f_T	$V_{CE} = 2V, I_C = 0.5A, \text{Pulse}$	—	240	—	MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10V, I_C = 0, f = 1MHz$	—	22	—	pF

* The 2SD1366A is grouped by h_{FE} as follows.

Mark	AC	AD
h_{FE}	85 to 170	120 to 240

■ See characteristic curves of 2SD1366.