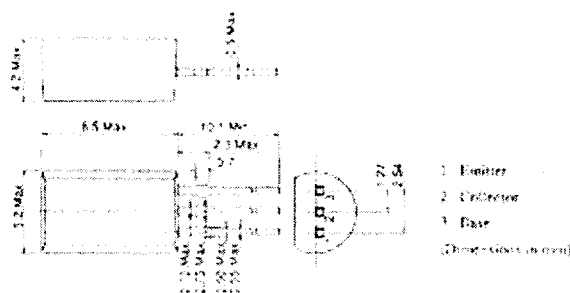


2SD667, 2SD667A

SILICON NPN EPITAXIAL

LOW FREQUENCY POWER AMPLIFIER

Complementary pair with 2S8647/A

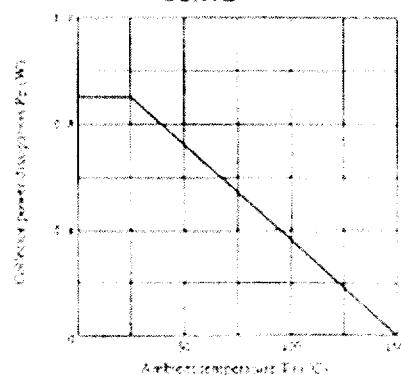


(JEDEC TO-92 MOD.)

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

Item	Symbol	2SD667	2SD667A	Unit
Collector to base voltage	V_{CBO}	120	120	V
Collector to emitter voltage	V_{CEO}	80	100	V
Emitter to base voltage	V_{EB0}	5	5	V
Collector current	I_C	1	1	A
Collector peak current	$I_{C(peak)}$	2	2	A
Collector power dissipation	P_C	0.9	0.9	W
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	2SD667			2SD867A			Unit
			min.	typ.	max.	min.	typ.	max.	
Collector to base breakdown voltage	$V_{BR(CBO)}$	$I_C = 10\mu A, I_E = 0$	120	—	—	120	—	—	V
Collector to emitter breakdown voltage	$V_{BR(CE)}$	$I_C = 1mA, R_{BE} = \infty$	80	—	—	100	—	—	V
Emitter to base breakdown voltage	$V_{BR(EB)}$	$I_E = 10\mu A, I_C = 0$	5	—	—	5	—	—	V
Collector cutoff current	I_{CBO}	$V_{CB} = 100V, I_E = 0$	—	—	10	—	—	10	μA
DC current transfer ratio	h_{FE1}^*	$V_{CE} = 5V, I_C = 150mA^{**}$	60	—	320	60	—	200	
	h_{FE2}	$V_{CE} = 5V, I_C = 500mA^{**}$	30	—	—	30	—	—	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500mA, I_E = 50mA^{**}$	—	—	1	—	—	1	V
Base to emitter voltage	V_{BE}	$V_{CE} = 5V, I_C = 150mA^{**}$	—	—	1.5	—	—	1.5	V
Gain bandwidth product	f_T	$V_{CE} = 5V, I_C = 150mA^{**}$	—	140	—	—	140	—	MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10V, I_C = 0, f = 1MHz$	—	12	—	—	12	—	pF

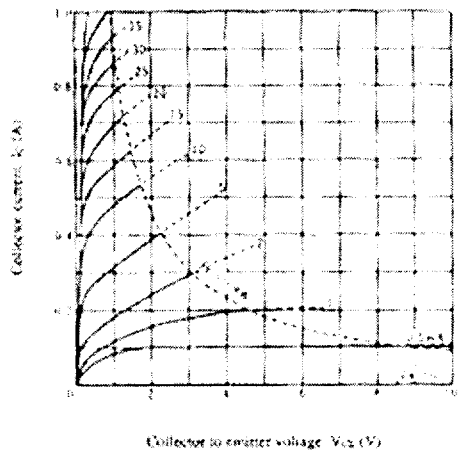
* The 230667 and 230667A are grouped by type as 1-40: no

• New Test

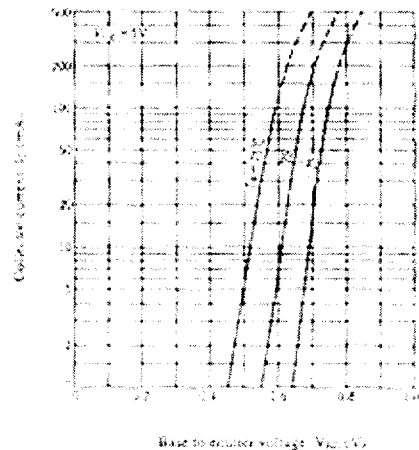
	B	C	D
2ND66C	60 to 120	100 to 200	100 to 110
2ND66A	60 to 120	100 to 200	

2SD667, 2SD667A

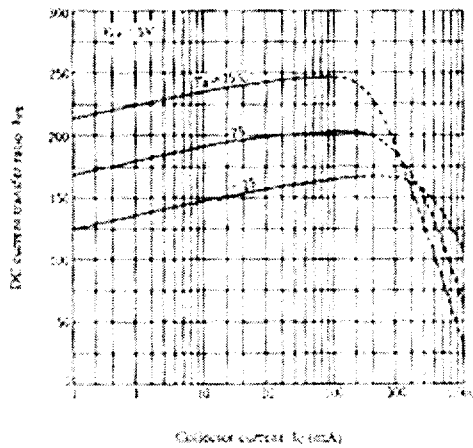
TYPICAL OUTPUT CHARACTERISTICS



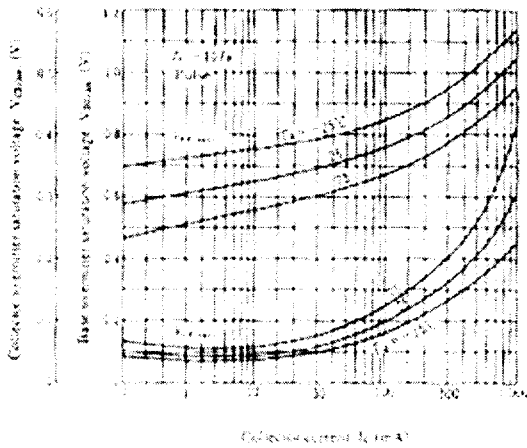
TYPICAL TRANSFER CHARACTERISTICS



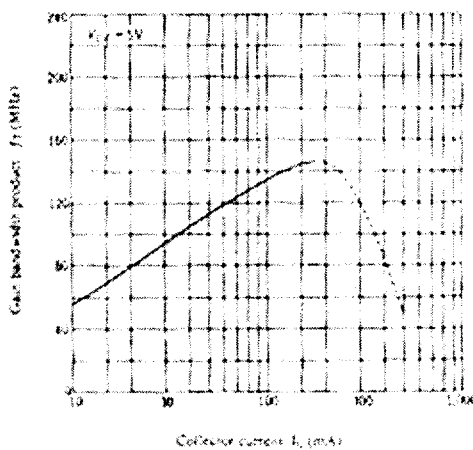
DC CURRENT TRANSFER RATIO VS. COLLECTOR CURRENT



SATURATION VOLTAGE VS. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT VS. COLLECTOR CURRENT



COLLECTOR OUTPUT CAPACITANCE VS. COLLECTOR TO BASE VOLTAGE

