

FEATURES

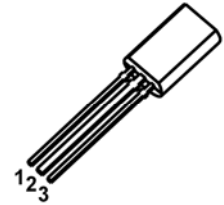
- Low Frequency Power Amplifier
- Complementary Pair with 2SB647/A

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector- Base Voltage	120	V
V _{CEO}	Collector-Emitter Voltage	2SD667	80
		2SD667A	100
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current -Continuous	600	MA
P _C	Collector Power Dissipation	900	mW
R _{θJA}	Thermal Resistance Junction to Ambient	139	°C/W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

TO-92

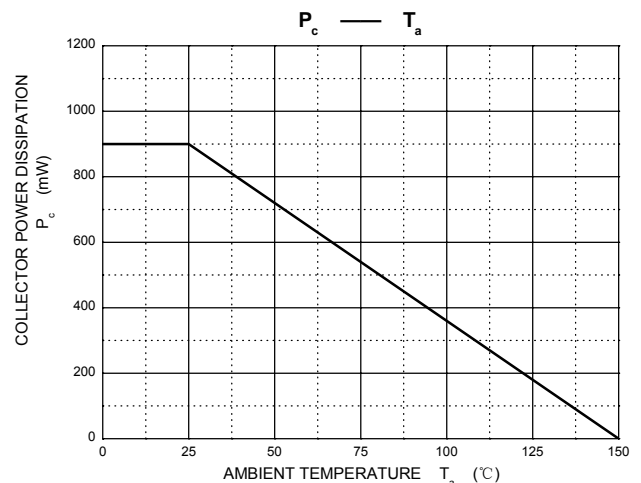
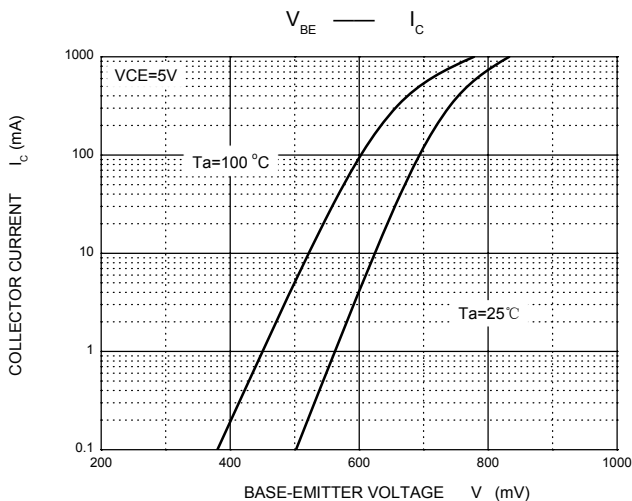
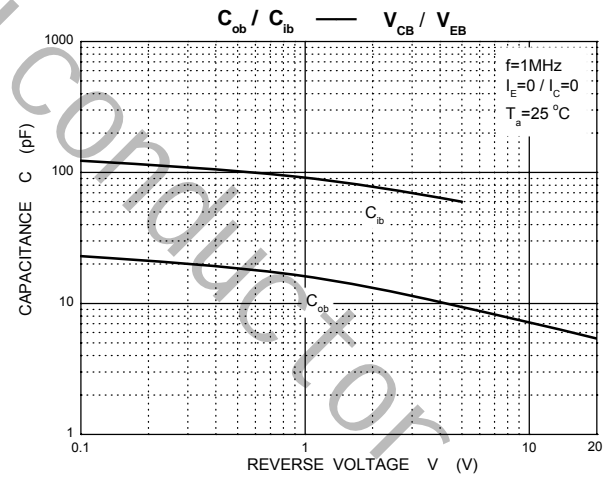
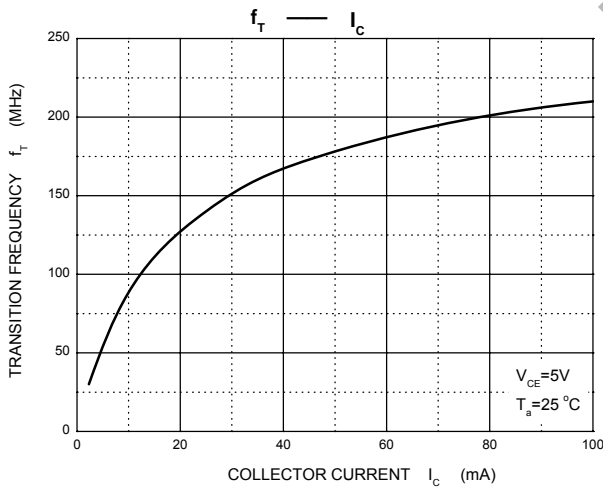
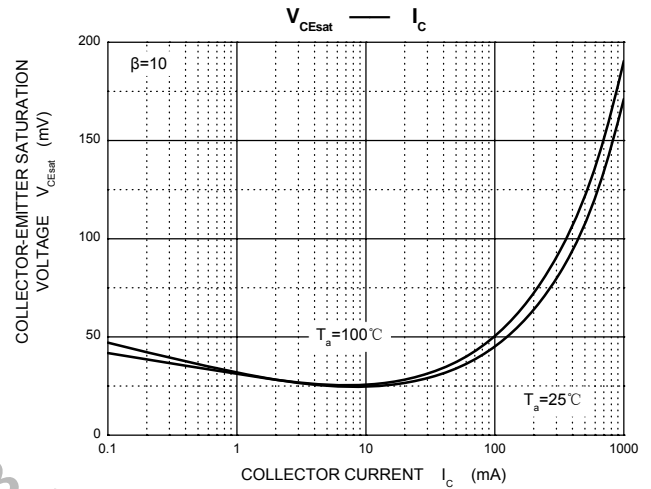
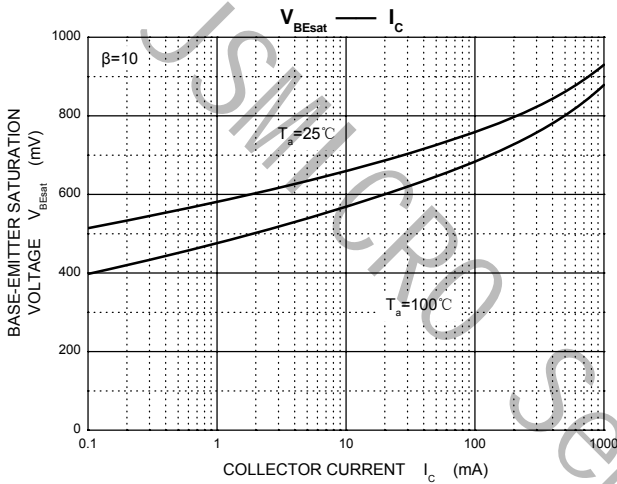
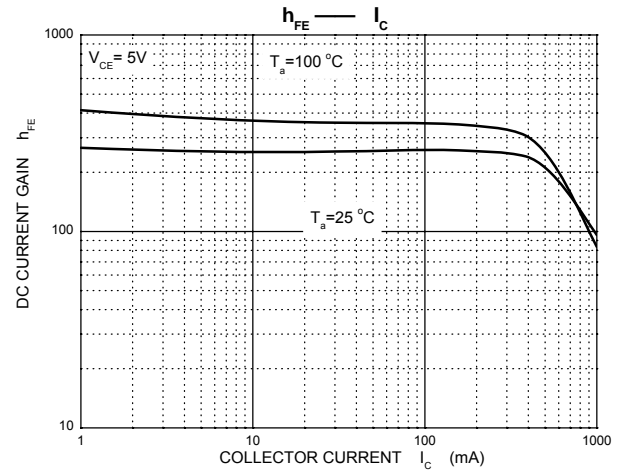
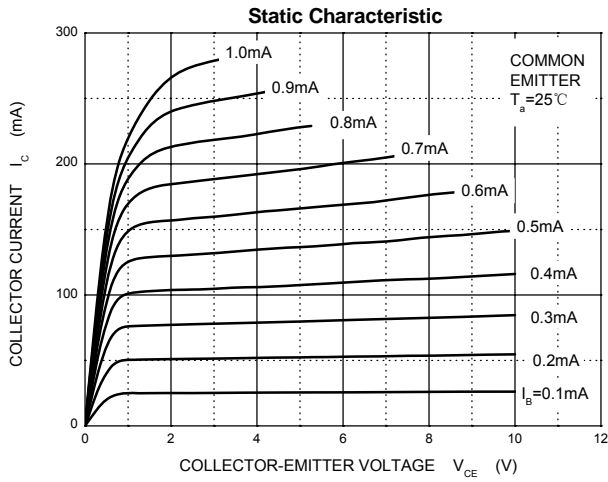
1. EMITTER
2. COLLECTOR
3. BASE

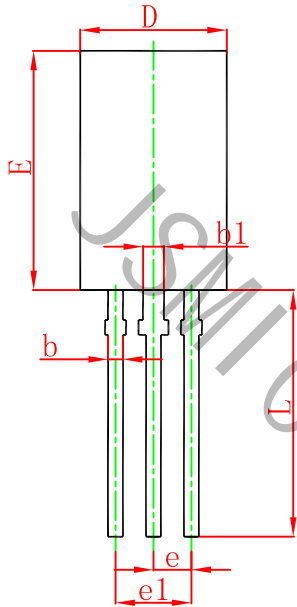
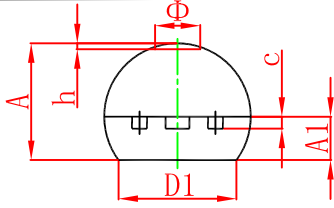

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =10μA, I _E =0	120			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	2SD667	80		V
			2SD667A	100		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =100V, I _E =0			10	μA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0			10	μA
DC current gain	h _{FE(1)}	V _{CE} =5V, I _C =150mA	2SD667	60	320	
			2SD667A	60	320	
	h _{FE(2)}	V _{CE} =5V, I _C =500mA	30			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =500mA, I _B =50mA			1	V
Base-emitter voltage	V _{BE}	V _{CE} =5V, I _C =150mA			1.5	V
Transition frequency	f _T	V _{CE} =5V, I _C =150mA		140		MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		12		pF

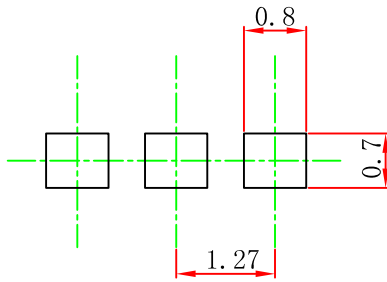
CLASSIFICATION OF h_{FE(1)}

Rank		B	C	D
Range	2SD667	60-120	100-200	160-320
	2SD667A	60-120	100-200	160-320



TO-92 Package Outline Dimensions


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	3.750	4.050	0.148	0.159
A1	1.280	1.580	0.050	0.062
b	0.380	0.550	0.015	0.022
b1	0.620	0.780	0.024	0.031
c	0.350	0.450	0.014	0.018
D	4.750	5.050	0.187	0.199
D1	4.000		0.157	
E	7.850	8.150	0.309	0.321
e	1.270 TYP.		0.050 TYP.	
e1	2.440	2.640	0.096	0.104
L	13.800	14.200	0.543	0.559
Φ		1.600		0.063
h	0.000	0.300	0.000	0.012

TO-92 Suggested Pad Layout

Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.