



1. EMITTER
2. COLLECTOR
3. BASE

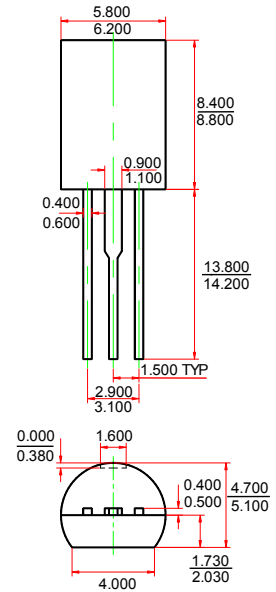
### Features

- ✧ Low frequency power amplifier
- ✧ Complementary pair with 2SB647/A

### MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector- Base Voltage	120	V
$V_{CEO}$	Collector-Emitter Voltage 2SD667	80	V
	2SD667A	100	
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current -Continuous	1	A
$P_C$	Collector Power Dissipation	900	mW
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55-150	$^\circ\text{C}$

### TO-92MOD



Dimensions in inches and (millimeters)

### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^\circ\text{C}$ unless otherwise specified)

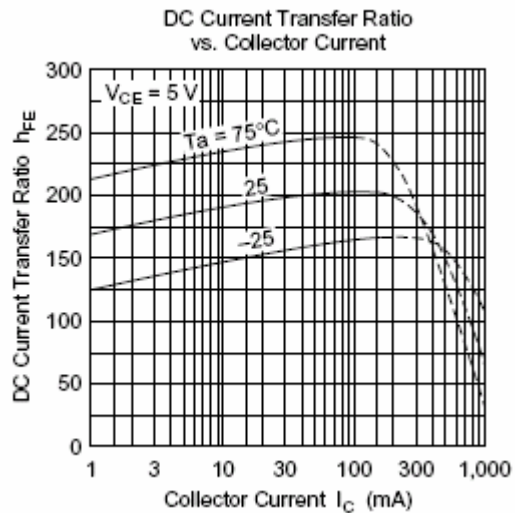
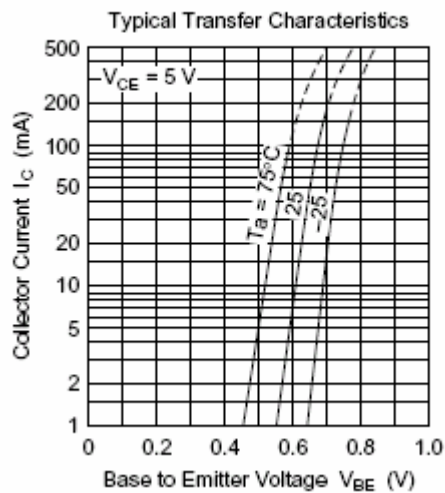
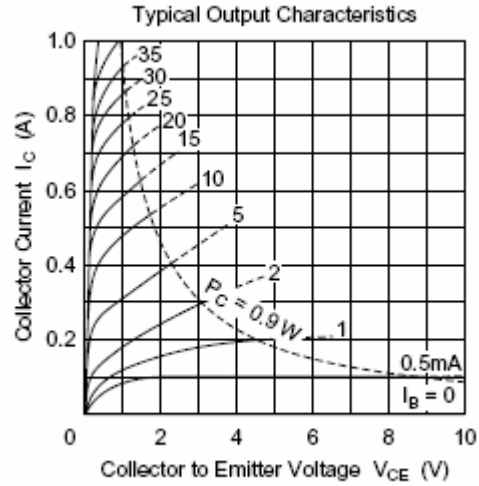
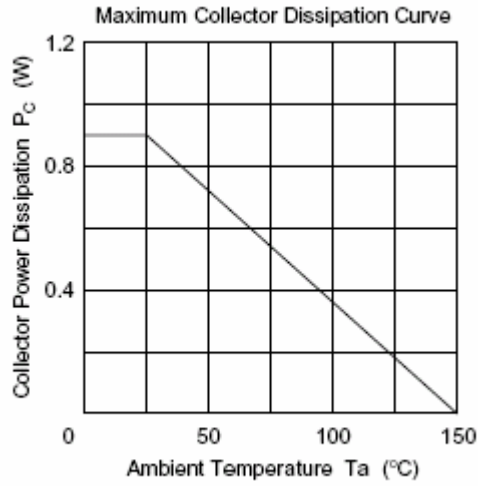
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	2SD667	80		V
			2SD667A	100		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=100\text{V}, I_E=0$			10	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=4\text{V}, I_C=0$			10	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE}=5\text{V}, I_C=150\text{mA}$	2SD667	60	320	
			2SD667A	60	200	
	$h_{FE(2)}$	$V_{CE}=5\text{V}, I_C=500\text{mA}$	30			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}$			1	V
Base-emitter voltage	$V_{BE}$	$V_{CE}=5\text{V}, I_C=150\text{mA}$			1.5	V
Transition frequency	$f_T$	$V_{CE}=5\text{V}, I_C=150\text{mA}$		140		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		12		pF

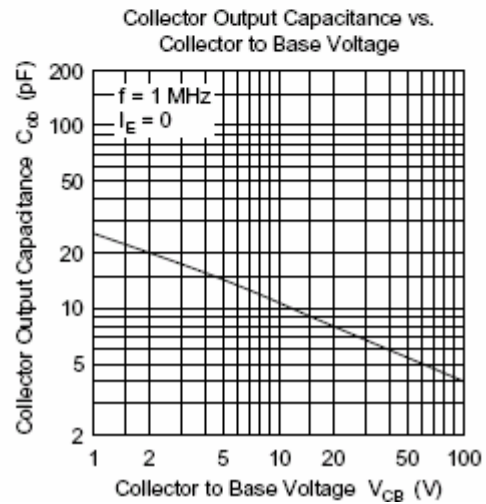
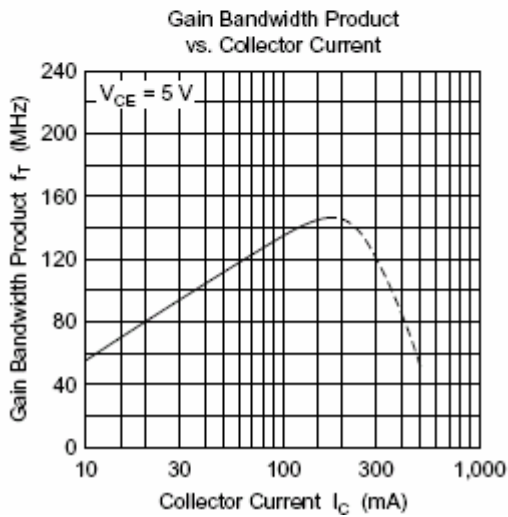
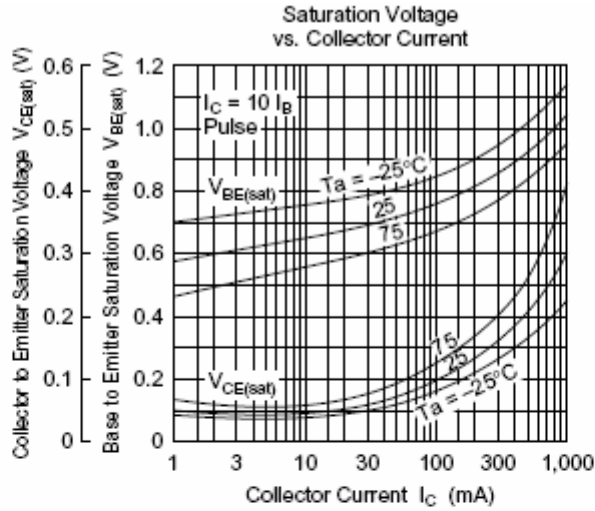
### CLASSIFICATION OF $h_{FE(1)}$

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



## Typical Characteristics





Package	Packing	Quantity	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92MOD	Bulk	500pcs/BP	5000pcs	245×170×100	50,000pcs	525×375×270
TO-92MOD	Tape	2000pcs/TP	2000pcs	333×245×43	20,000pcs	502×403×300