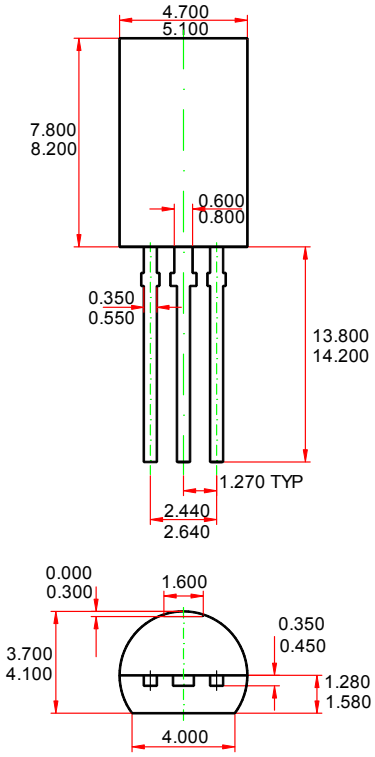
2SD667/2SD667A

TO-92L Bipolar Transistor (NPN)

1. EMITTER
2. COLLECTOR
3. BASE

TO-92L



Dimensions in inches and (millimeters)

Features

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

MAXIMUM RATINGS (T_A=25℃ 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	℃
T_{stg}	Storage Temperature	-55-150	℃

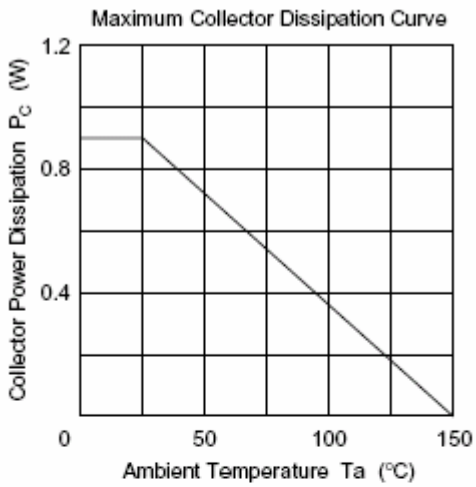
ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

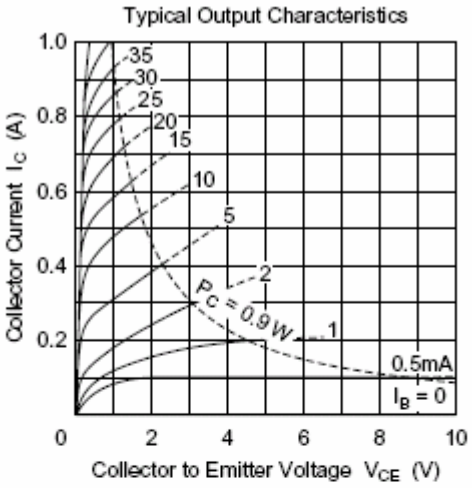
Parameter	Symbol	Test conditions		MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=10μA,I_E=0		120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	2SD667	80			V
			2SD667A	100			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10μA,I_C=0		5			V
Collector cut-off 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		200	
	$h_{FE(2)}$	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

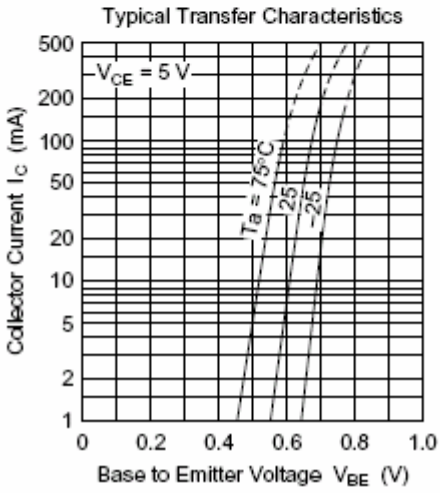
CLASSIFICATION OF $h_{FE(1)}$

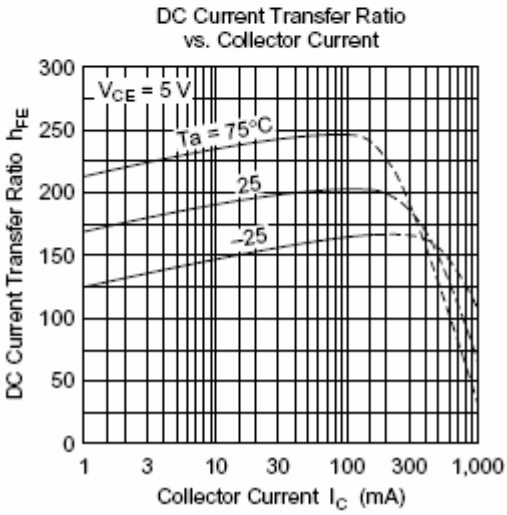
Rank		B	C	D
Range	2SD667	60-120	100-200	160-320
	2SD667A	60-120	100-200	

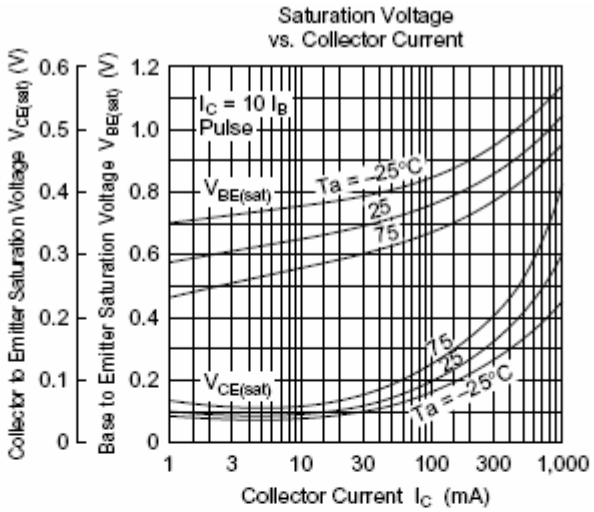
Typical Characteristics

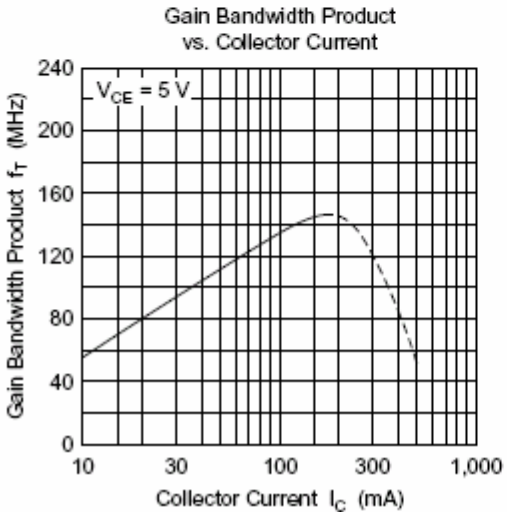


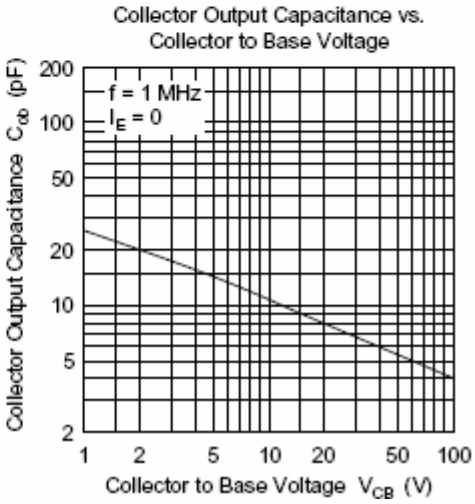












Package	Packing	Quantity	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92L	Bulk	500pcs/Bag	5000pcs	245×170×100	50,000pcs	525×375×270
TO-92L	Tape	2000pcs/Tap	2000pcs	333×203×42	20,000pcs	493×400×264