

**TO-92L Plastic-Encapsulate Transistors****2SD667,2SD667A** TRANSISTOR (NPN)**FEATURES**

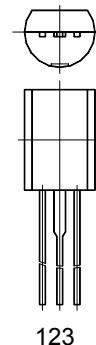
- Low frequency power amplifier
- Complementary pair with 2SB647/A

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-92L

1. EMITTER
2. COLLECTOR
3. BASE

**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	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0$			10	μA
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

2SD667,667A

