

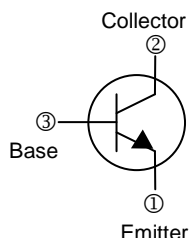
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

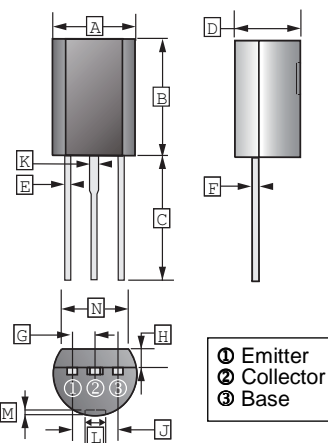
- Low Frequency Power Amplifier
- Complementary Pair with 2SB647A

CLASSIFICATION OF h_{FE} (1)

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



TO-92MOD



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	5.50	6.50	H	1.70	2.05
B	8.00	9.00	J	2.70	3.20
C	12.70	14.50	K	0.85	1.15
D	4.50	5.30	L	1.60 Max	
E	0.35	0.65	M	0.00	0.40
F	0.30	0.51	N	4.00 Min	
G	1.50 TYP.				

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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CB0}	120	V
Collector to Emitter Voltage	V_{CEO}	100	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current - Continuous	I_C	1	A
Collector Power Dissipation	P_C	0.9	W
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	120	-	-	V	$I_C=10\mu\text{A}, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	100	-	-	V	$I_C=1\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	$I_E=10\mu\text{A}, I_C=0$
Collector Cut-Off Current	I_{CBO}	-	-	10	μA	$V_{CB}=100\text{V}, I_E=0$
Emitter Cut-Off Current	I_{EBO}	-	-	10	μA	$V_{EB}=4\text{V}, I_C=0$
DC Current Gain	$h_{FE(1)}$	60	-	320		$V_{CE}=5\text{V}, I_C=150\text{mA}$
	$h_{FE(2)}$	30	-	-		$V_{CE}=5\text{V}, I_C=500\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	1	V	$I_C=500\text{mA}, I_B=50\text{mA}$
Base to Emitter Voltage	V_{BE}	-	-	1.5	V	$V_{CE}=5\text{V}, I_C=150\text{mA}$
Transition Frequency	f_T	-	140	-	MHZ	$V_{CE}=5\text{V}, I_C=150\text{mA}$
Collector Output Capacitance	C_{ob}	-	12	-	pF	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHZ}$