

Description

Silicon NPN transistor in a TO-92LM Plastic Package

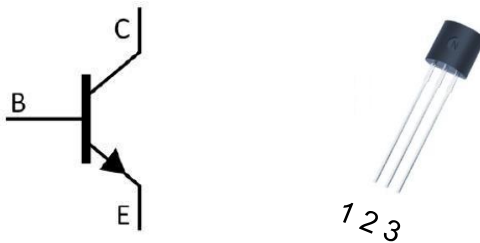
Features

- Complementary pair with 2SB647(A).

Applications

Low frequency power amplifier.

Symbol	Parameter	Max	Unit
V_{CE0}	collector-emitter voltage	100	V
I_c	collector current (DC)	1.0	A

Equivalent Circuit & Pinning


PIN1: Base

PIN 2: Collector

PIN 3: Emitter

 h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	B	C	D
h_{FE} Range	60~120	100~200	160~320

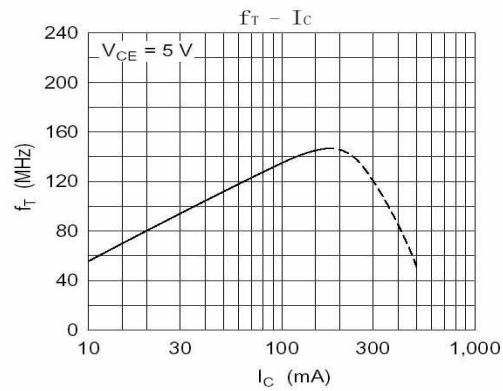
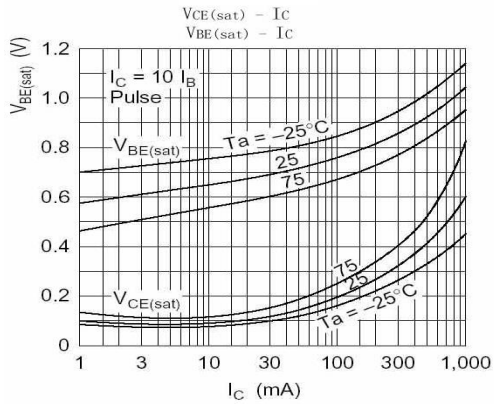
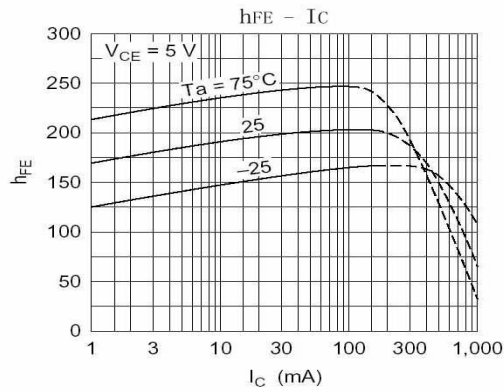
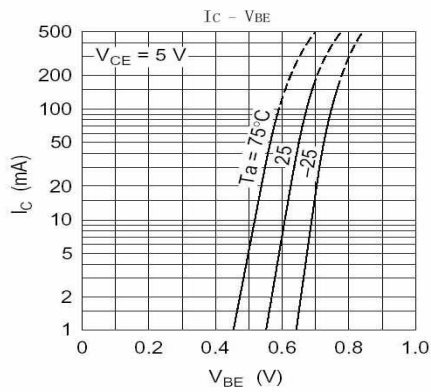
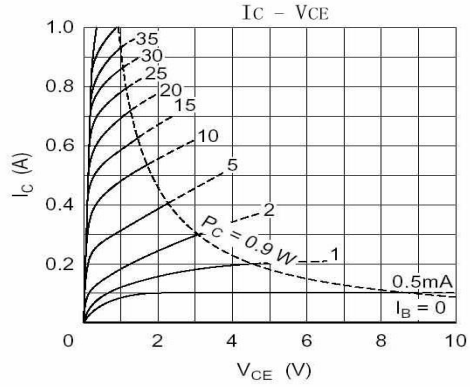
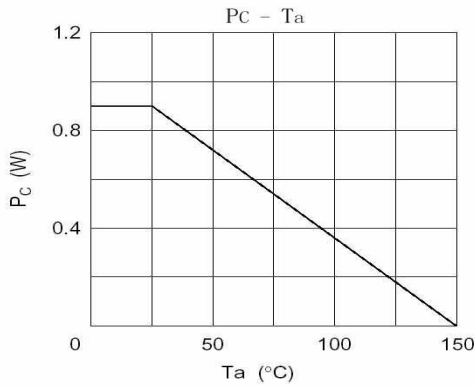
Absolute Maximum Ratings(Ta=25°C)

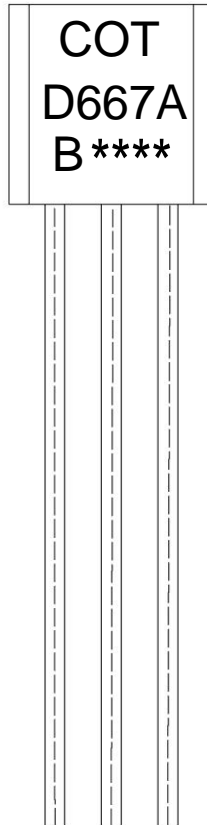
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	120	V
Collector to Emitter Voltage	V_{CEO}	2SD667	80
		2SD667A	100
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current (DC)	I_C	1.0	A
Collector Current (Pulse)	I_{CP}	2.0	A
Collector Power Dissipation	P_C	900	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

Electrical Characteristic (Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=10\mu A$ $I_E=0$	120			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0mA$ $I_B=0$	80			V
			100			
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\mu A$ $I_C=0$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=100V$ $I_E=0$			10	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5.0V$ $I_C=150mA$	60		320	
	$h_{FE(2)}$	$V_{CE}=5.0V$ $I_C=500mA$	30			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=50mA$			1.0	V
Base to Emitter Saturation Voltage	V_{BE}	$V_{CE}=5.0V$ $I_C=150mA$			1.5	V
Transition Frequency	f_T	$V_{CE}=5.0V$ $I_C=150mA$		140		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V$ $I_E=0$ $f=1.0MHz$		12		pF

Electrical Characteristic Curve



Marking Instructions


Note:

COT: Company Code.

D667A: Product Type.

B: hFE Classifications Symbol.

****: Lot No. Code, code change with Lot No

h _{FE} Classifications Symbol	B	C	D
h _{FE} Range	60~120	100~200	160~320

Packaging SPEC.
BULK

Package Type	Units					Dimension (unit: mm3)		
	Units/Bag	Bags/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Bag	Inner Box	Outer Box
TO-92LM	1,000	8	8,000	5	40,000	135×190	237×172×102	560×245×195

AMMO

Package Type	Units					Dimension (unit: mm3)	
	Units/tape	Tape/Inner Box	Rows/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Inner Box	Outer Box
TO-92LM	2,500	1	100	10	25,000	328×230×42	小箱480×346×235 大箱547×407×268

Package Outline Dimensions

TO-92LM

Unit: mm

