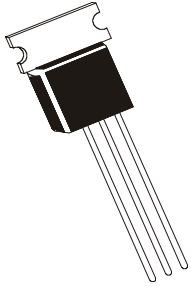


**NPN SILICON EPITAXIAL TRANSISTORS**

**CSD667  
CSD667A  
TO-237  
BCE**



**Low Frequency Power Amplifier  
Complementary CSB647/A**

**ABSOLUTE MAXIMUM RATINGS(Ta=25 deg C)**

DESCRIPTION	SYMBOL	CSD667	CSD667A	UNIT
Collector -Base Voltage	VCBO	120	120	V
Collector -Emitter Voltage	VCEO	80	100	V
Emitter Base Voltage	VEBO	5.0	5.0	V
Collector Current	IC	1.0	1.0	A
Peak	IC	2.0	2.0	A
Collector Power Dissipation	PC	0.9	0.9	W
Operating And Storage Junction Temperature Range	Tj, Tstg	-55 to +150	-55 to +150	deg C

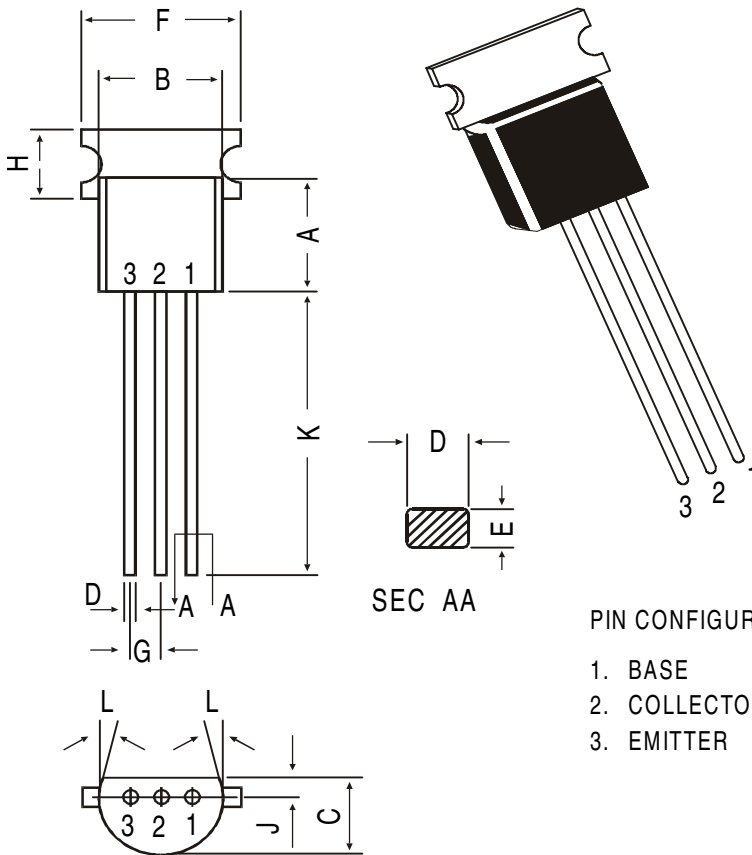
**ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Otherwise Specified)**

DESCRIPTION	SYMBOL	TEST CONDITION	CSD667	CSD667A	UNIT
Collector -Base Voltage	VCBO	IC=10uA, IE=0	>120	>120	V
Collector -Emitter Voltage	VCEO	IC=1mA, IB=0	>80	>100	V
Emitter Base Voltage	VEBO	IE=10uA, IC=0	>5.0	>5.0	V
Collector Cut off Current	ICBO	VCB=100V, IE=0	<10	<10	uA
DC Current Gain	hFE*	IC=150mA, VCE=5V**	60-320	60-200	
		IC=500mA, VCE=5V**	>30	>30	
Collector Emitter Saturation Voltage	VCE(Sat)	IC=500mA, IB=50mA**	<1.0	<1.0	V
Base to Emitter Voltage	VBE	IC=150mA, VCE=5V**	<1.5	<1.5	V
Dynamic Characteristics					
Gain Bandwidth Product	ft	IC=150mA, VCE=5V**	typ140	typ140	MHz
Output Capacitance	Cob	VCB=10V, f=1MHz	typ12	typ12	pF

CLASSIFICATION		B	C	D
hFE*	CSD667	60-120	100-200	160-320
hFE*	CSD667A	60-120	100-200	-

\*\*Pulse Test

## TO-237 Plastic Package



All dimensions in mm.

DIM	MIN.	MAX.
A	4.32	5.33
B	4.45	5.20
C	3.18	4.19
D	0.41	0.55
E	0.35	0.50
F	—	5.40
G	1.14	1.40
H	—	2.54
K	12.70	—
L	5 DEG	
J	1.14	1.53

### PIN CONFIGURATION

1. BASE
2. COLLECTOR
3. EMITTER

## Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-237 Bulk	1K/polybag	240 gm/1K pcs	3" x 7.5" x 7.5"	5.0K	17" x 15" x 13.5"	80.0K	26.2 kgs
TO-237 T&A	2K/ammo box	725 gm/2K pcs	12.5" x 8" x 1.8"	2.0K	17" x 15" x 13.5"	32.0K	13.8 kgs

## Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished on the CDIL Web Site/CD is believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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