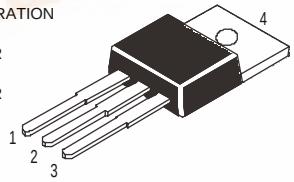
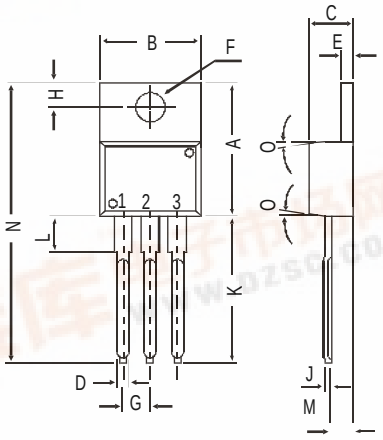
TO-220 Plastic Package

CSB857, CSB858
CSD1133, CSD1134

CSB857, 858 PNP PLASTIC POWER TRANSISTORS
CSD1133, 1134 NPN PLASTIC POWER TRANSISTORS
Low frequency Power Amplifier

PIN CONFIGURATION
1. BASE
2. COLLECTOR
3. EMITTER
4. COLLECTOR





DIM	MIN.	MAX.
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D		0.90
E	1.15	1.40
F	3.75	3.88
G	2.29	2.79
H	2.54	3.43
J		0.56
K	12.70	14.73
L	2.80	4.07
M	2.03	2.92
N		31.24
O	DEG 7	

All diminsions in mm.

ABSOLUTE MAXIMUM RATINGS

			857 1133	***858 1134***	
Collector-base voltage (open emitter)	V_{CBO}	*max.*	*70*	*70*	*V*
Collector-emitter voltage (open base)	V_{CEO}	*max.*	*50*	*60*	*V*
Collector current	I_C	*max.*	*4.0*		*A*
Total power dissipation up to T_C = 25°C	P_{tot}	*max.*	*40*		*W*
Junction temperature	T_j	*max.*	*150*		*°C*
Collector-emitter saturation voltage					
I_C = 2 A; I_B = 200 mA	V_{CEsat}	*max.*	*1.0*		*V*
D.C. current gain					
I_C = 1 A; V_{CE} = 4 V	h_{FE}	*min.*	*60*		
		max.	*320*		

RATINGS *(at T_A=25°C unless otherwise specified)*

Limiting values			***857 1133***	***858 1134***	
Collector-base voltage (open emitter)	V_{CBO}	*max.*	*70*	*70*	*V*
Collector-emitter voltage (open base)	V_{CEO}	*max.*	*50*	*60*	*V*
Emitter-base voltage (open collector)	V_{EBO}	*max.*	*5.0*		*V*

Collector current	I_C	*max.*	*4.0*	*A*
Collector current (Peak value)	I_C	*max.*	*8.0*	*A*
Total power dissipation up to T_C = 25°C	P_{tot}	*max.*	*40*	*W*
Junction temperature	T_j	*max.*	*150*	*°C*
Storage temperature	T_{stg}		*–65 to +150*	*°C*

CHARACTERISTICS

T_{amb} = 25°C unless otherwise specified

			857	***858***	
			1133	***1134***	
Collector cutoff current					
I_E = 0; V_{CB} = 50V	I_{CBO}	*max.*		*1.0*	*µA*
Breakdown voltages					
I_C = 50 mA; I_B = 0	V_{CEO}	*min.*	*50*	*60*	*V*
I_C = 10 µA; I_E = 0	V_{CBO}	*min.*		*70*	*V*
I_E = 10 µA; I_C = 0	V_{EBO}	*min.*		*5.0*	*V*
Saturation voltage					
I_C = 2 A; I_B = 0.2 A	V_{CEsat}*	*max.*		*1.0*	*V*
Base emitter on voltage					
I_C = 1 A; V_{CE} = 4 V	$V_{BE(on)}$*	*max.*		*1.0*	*V*
D.C. current gain					
I_C = 0.1 A; V_{CE} = 4 V	h_{FE}*	*min.*		*35*	
*I_C = 1.0 A; V_{CE} = 4 V***	h_{FE}*	*min.*		*60*	
		max.		*320*	
Transition frequency					
I_C = 0.5 A; V_{CE} = 4 V ***PNP***	f_T	*typ.*		*15*	*MHz*
NPN		*typ.*		*7.0*	*MHz*

***** h_{FE} classification: B: 60-120 C: 100-200 D: 160-320***

* *Pulse test*

Notes

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 are 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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