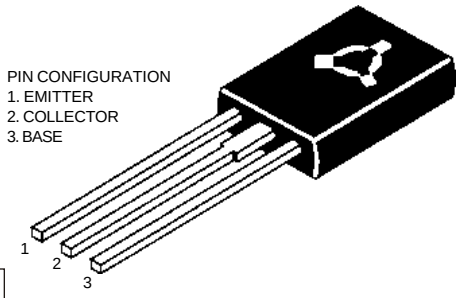
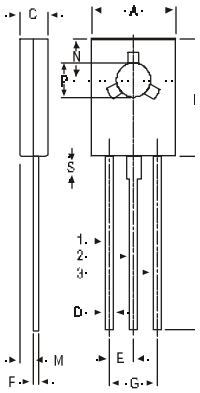
TO-126 (SOT-32) Plastic Package **CSA715**

CSA715 PNP PLASTIC POWER TRANSISTOR

Complementary to CSC1162

Low frequency Power Amplifier





DIM	MIN.	MAX.
A	7.4	7.8
B	10.5	10.8
C	2.4	2.7
D	0.7	0.9
E	2.25 TYP.	
F	0.49	0.75
G	4.5 TYP.	
L	15.7 TYP.	
M	1.27 TYP.	
N	3.75 TYP.	
P	3.0	3.2
S	2.5 TYP.	

ALL DIMENSIONS IN MM

ABSOLUTE MAXIMUM RATINGS

Collector-base voltage (open emitter)	V_{CBO}	*max.*	*35 V*
Collector-emitter voltage (open base)	V_{CEO}	*max.*	*35 V*
Collector current	I_C	*max.*	*2.5 A*
Total power dissipation up to T_C = 25°C	P_{tot}	*max.*	*10 W*
Junction temperature	T_j	*max.*	*150 °C*
Collector-emitter saturation voltage			
I_C = 2 A; I_B = 0.2 A	V_{CEsat}	*max.*	*1.0 V*
D.C. current gain			
I_C = 0.5 A; V_{CE} = 2 V	h_{FE}	*min.*	*60*
		max.	*320*

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

Limiting values			
Collector-base voltage (open emitter)	V_{CBO}	*max.*	*35 V*
Collector-emitter voltage (open base)	V_{CEO}	*max.*	*35 V*
Emitter-base voltage (open collector)	V_{EBO}	*max.*	*5.0 V*
Collector current	I_C	*max.*	*2.5 A*

Collector current (Peak value)	I_C	*max.*	*3 A*
Total power dissipation up to T_A *= 25°C*	P_{tot}	*max.*	*0.75 W*
Total power dissipation up to T_C *= 25°C*	P_{tot}	*max.*	*10 W*
Junction temperature	T_j	*max.*	*150 °C*
Storage temperature	T_{stg}		*–65 to +150 °C*

CHARACTERISTICS

T_{amb} *= 25°C unless otherwise specified*

Collector cutoff current			
$I_E = 0$; $V_{CB} = 35$ *V*	I_{CBO}	*max.*	*20 µA*
Breakdown voltages			
$I_C = 10$ *mA*; $I_B = 0$	V_{CEO}	*min.*	*35 V*
$I_C = 1$ *mA*; $I_E = 0$	V_{CBO}	*min.*	*35 V*
$I_E = 1$ *mA*; $I_C = 0$	V_{EBO}	*min.*	*5 V*
Saturation voltage			
$I_C = 2$ *A*; $I_B = 0.2$ *A*	V_{CEsat}	*max.*	*1.0 V*
Base-emitter on voltage			
$I_C = 1.5$ *A*; $V_{CE} = 2$ *V*	$V_{BE(on)}$	*max.*	*1.5 V*
D.C. current gain			
$I_C = 0.5$ *A*; $V_{CE} = 2$ *V***	h_{FE}	*min.*	*60*
		max.	*320*
$I_C = 1.5$ *A*; $V_{CE} = 2$ *V (Pulse)*	h_{FE}	*min.*	*20*
Transition frequency			
$I_C = 0.2$ *A*; $V_{CE} = 2$ *V*	f_T	*typ.*	*160 MHz*

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

Customer 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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