IS/ISO 9002
Lic# OSC/L- 000019.2

IS / IECQC 700000
IS / IECQC 750100

Continental Device India Limited
An IS/ISO 9002 and IECQ Certified Manufacturer

SOT-23 Formed SMD Package **CSC2712**

SILICON PLANAR EPITAXIAL TRANSISTOR

N-P-N transistor

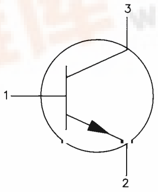
Marking

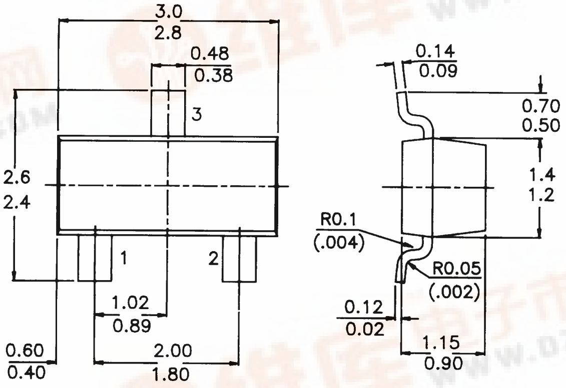
CSC2712Y=1E
CSC2712GR(G)=1F
CSC2712BL(L)=1G

PACKAGE OUTLINE DETAILS
ALL DIMENSIONS IN mm

Pin configuration

1 = BASE
2 = EMITTER
3 = COLLECTOR





ABSOLUTE MAXIMUM RATINGS

Collector-base voltage (open emitter)	V_{CBO}	*max.*	*60 V*
Collector-emitter voltage (open base)	V_{CEO}	*max.*	*50 V*
Emitter-base voltage (open collector)	V_{EBO}	*max.*	*5 V*
Collector current (peak value)	I_C	*max.*	*150 mA*
Total power dissipation at T_{amb} *= 25°C*	P_{tot}	*max.*	*150 mW*
Junction temperature	T_j	*max.*	*150 ° C*
D.C. current gain			
$-I_C = 2$ mA; $-V_{CE} = 6$V	h_{FE}	*min.*	*70*
		max.	*700*
Transition frequency			
$I_C = 1$ mA; $V_{CE} = 10$ V	f_T	*min.*	*80 MHz*
Noise figure at $R_S = 10$ KW			
$I_C = 0.1$ mA; $V_{CE} = 6$V;			
f = 1 kHz	*F*	*max*	*10 dB*

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

Limiting values				
Collector-base voltage (open emitter)	V_{CBO}	max.	60	V
Collector-emitter voltage (open base)	V_{CEO}	max.	50	V
Emitter-base voltage (open collector)	V_{EBO}	max.	5	V
Collector current (d.c.)	I_C	max.	150	mA
Base current	I_B	max.	30	mA
Total power dissipation at T_{amb} = 25°C	P_{tot}	max.	150	mW
Junction temperature	T_j	max.	150	°C
Storage temperature	Tstg		–50 to +150	°C

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

Collector cut-off current $I_E = 0$; $V_{CB} = 60$ V	I_{CBO}	max.	100	nA
Emitter cut-off current $I_C = 0$; $V_{EB} = 5$ V	I_{EBO}	max.	100	nA
Saturation voltage $I_C = 100$ mA; $I_B = 10$ mA	V_{CEsat}	max.	250	mV
D.C. current gain $I_C = 2$ mA; $V_{CE} = 6$ V	h_{FE}	min.	70	
		max.	700	
	Y	min.	120	
		max.	240	
	GR(G)	min.	200	
		max.	400	
	BL(L)	min.	350	
		max.	700	
Transition frequency $I_C = 1$ mA; $V_{CE} = 10$ V	f_T	min.	80	MHz
Noise figure at R_g = 10 kW $V_{CE} = 6$ V; $I_C = 0.1$ mA $f = 1$ kHz	N_F	max.	10	dB

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 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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