



PNP SILICON PLANAR TRANSISTOR

CP100 CN100

TO-237 Plastic Package

CN100 And CP100 Are Medium Power Transitors Suitable For a Wide Range of Medium Voltage and Current Applications.

Complementary CN100

ABSOLUTE MAXIMUM RATINGS(Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	V_{CBO}	60	V
Collector -Emitter Voltage	V_{CEO}	50	V
Emitter Base Voltage	V_{EBO}	7	V
Collector Current Continuous	I _C	1	Α
Power Dissipation @Ta=25°C	P_{TA}	800	mW
Derate Above 25°C		6	mW/°C
Operating and Storage Junction	T_{j}, T_{stg}	-55 to +150	°C
Temperature Range	, ,		

ELECTRICAL CHARACTERISTICS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	VALUE		
			MIN	MAX	UNIT
Collector Emitter Breakdown Voltage	V _{CEO} *	I _C =10mA, I _B =0	50		V
Collector -Base Breakdown Voltage	V_{CBO}	$I_{C}=100\mu A, I_{E}=0$	60		V
Emitter-Base Breakdown Voltage	V_{EBO}	$I_E=100\mu A, I_C=0$	7		V
Collector Leakage Current	I_{CBO}	V_{CB} =40 V , I_{E} =0		50	nA
Emitter Leakage Current	I_{EBO}	$V_{EB}=5V$, $I_{E}=0$		25	nA
DC Current Gain	h _{FE} *	$I_C=150$ mA, $V_{CE}=1$ V	50	280	
Collector Emitter Saturation Voltage	$V_{CE(sat)}^*$	$I_C=150$ mA, $I_B=15$ mA		0.6	V
Base Emitter On Voltage	$V_{BE(on)}$	$I_C=150$ mA, $V_{CE}=1$ V		0.9	V

DESCRIPTION	SYMBOL TEST CONDITION		VALUE			
			MIN	TYP	MAX	UNIT
DYNAMIC CHARACTERISTICS						
Transition Frequency	f _T	V_{CE} =10V, I_{C} =50mA, f =20MHz		80		
*Pulse Condition: Pulse Width <300	hie Duty Cycle	20/				

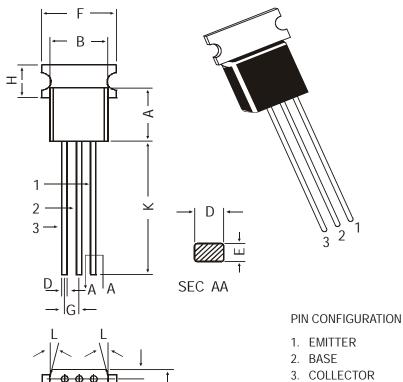
*Pulse Condition: Pulse Width <300µs, Duty Cycle <2%

 CLASSIFICATION
 A
 B

 hFE
 50-120
 100-200

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	DIM	MIN.	MAX.
All diminsions in mm.	Α	4.32	5.33
	В	4.45	5.20
	С	3.18	4.19
	D	0.41	0.55
	Ε	0.35	0.50
	F	_	5.40
	G	1.14	1.40
	Н		2.54
	Κ	12.70	_
	L	5 DEG	
All (J	1.14	1.53

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Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-237 Bulk TO-237 T&A	1K/polybag 2K/ammo box	240 gm/1K pcs 725 gm/2K pcs	3" x 7.5" x 7.5" 12.5" x 8" x 1.8"	5K 2K	17" x 15" x 13.5" 17" x 15" x 13.5"	80K 32K	26.2 kgs 13.8 kgs

Notes CP100 CN100

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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 in the Data Sheet and 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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



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