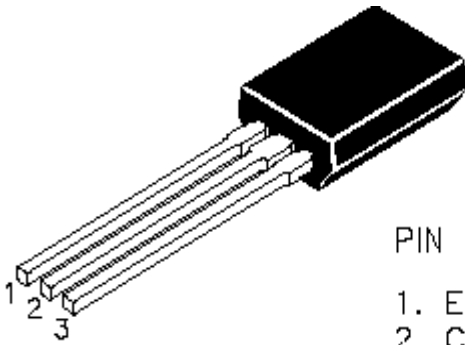


SILICON PLANAR TRANSISTORS

CLA1020 PNP
CLC2655 NPN

TO-92L
Plastic Package



PIN CONFIGURATION:-

1. EMITTER
2. COLLECTOR
3. BASE

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

DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Base Voltage	V _{CB0}	50	V
Collector Emitter Voltage	V _{CEO}	50	V
Emitter Base Voltage	V _{EBO}	5	V
Collector Current	I _C	2	A
Collector Power Dissipation	P _C	900	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

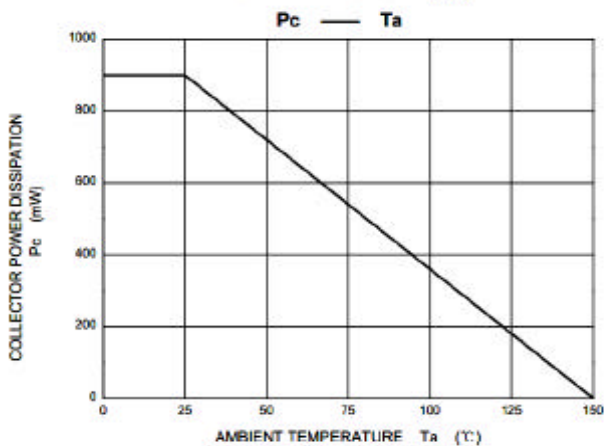
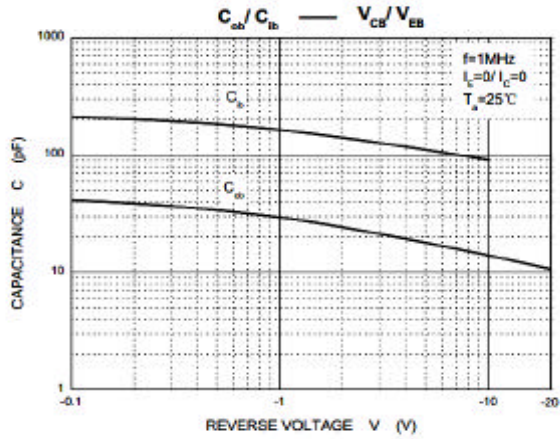
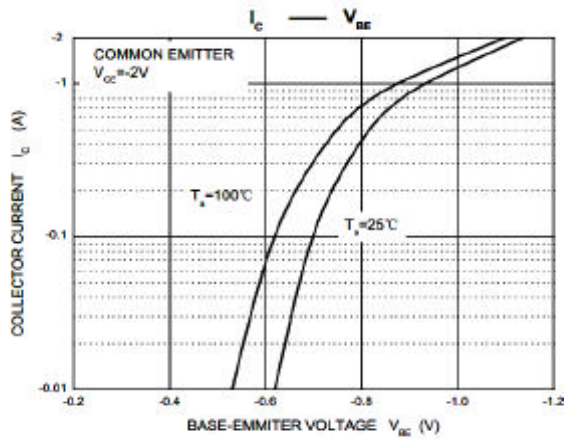
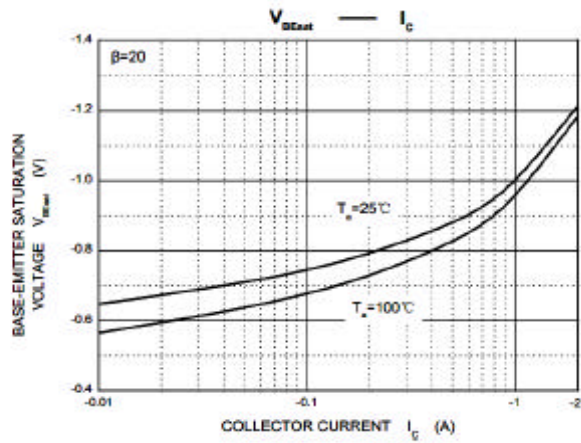
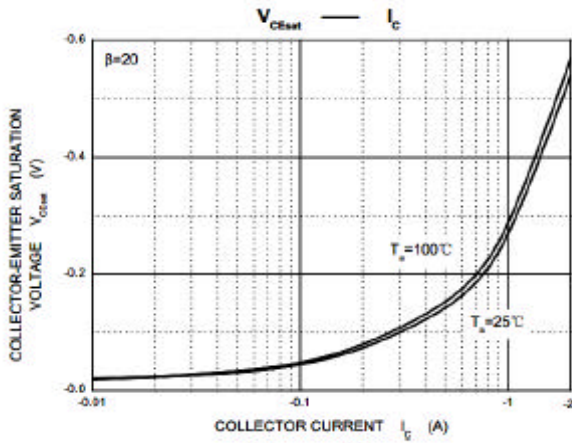
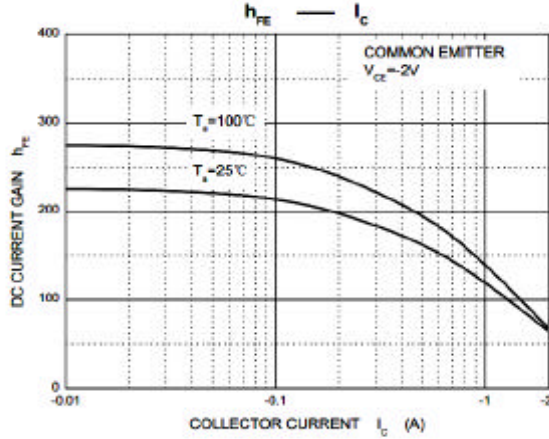
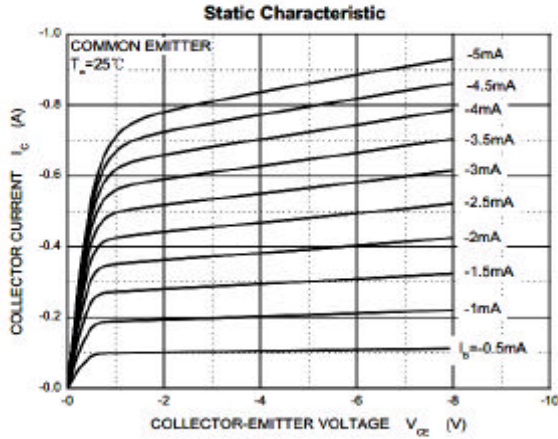
ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise)

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNITS
Collector Base Breakdown Voltage	V _{(BR)CBO}	I _C = 100µA, I _E = 0	50			V
Collector Emitter Breakdown Voltage	V _{(BR)CEO}	I _C = 10mA, I _B = 0	50			V
Emitter Base Breakdown Voltage	V _{(BR)EBO}	I _E = 100µA, I _C = 0	5			V
Collector Cut Off Current	I _{CBO}	V _{CB} = 50V, I _E = 0			1	µA
Emitter Cut Off Current	I _{EBO}	V _{EB} = 5V, I _C = 0			1	µA
DC Current Gain	h _{FE(1)}	V _{CE} = 2V, I _C = 0.5A	70		240	
	h _{FE(2)}	V _{CE} = 2V, I _C = 1.5A	40			
Collector Emitter Saturation Voltage	V _{CE(SAT)}	I _C = 1A, I _B = 50mA			0.5	V
Base Emitter Saturation Voltage	V _{BE(SAT)}	I _C = 1A, I _B = 50mA			1.2	V
Transistor Frequency	f _T	V _{CE} = 2V, I _C = 500mA		100		MHz
Collector Output Capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f = 1MHz		Typical 40 (PNP) Typical 30 (NPN)		pF
Turn On Time	t _{on}	V _{CC} = 30V, I _{B1} = I _{B2} = 0.05A, I _C = 1A		0.1		µS
Storage Time	t _{stg}			1		
Fall Time	t _f			0.1		

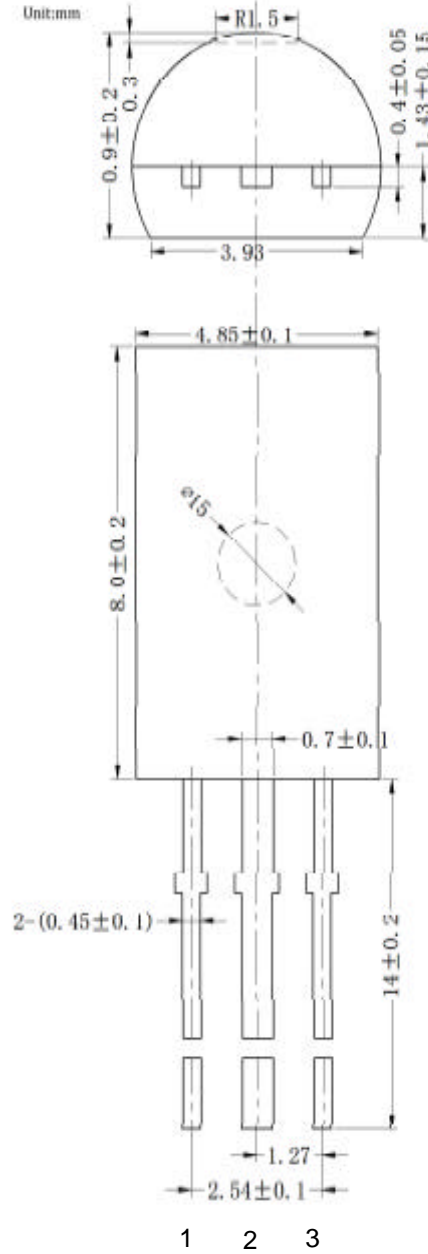
CLASSIFICATION OF h_{FE(1)}

Rank		O	Y
Range		70-140	120-240

TYPICAL CHARACTERISTICS CURVES



TO-92L PACKAGE OUTLINE AND DIMENSION



1.Emitter

2.Collector

3.Base



Continental Device India Limited

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Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's 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 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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