

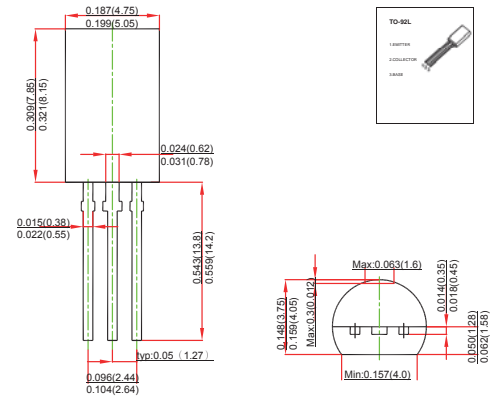
TO-92L Plastic-Encapsulate Transistors

FEATURES

- Low Saturation Voltage: $V_{CE(sat)}=0.5V(\text{Max})(I_C=1A)$
- High Speed Switching Time: $t_{stg}=1\mu s(\text{Typ.})$
- Complementary to 2SA1020
- TRANSISTOR (NPN)

MECHANICAL DATA

- Case style: TO-92L molded plastic
- Mounting position: any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Symbol	Unit
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current –Continuous	2	A
P_C	Collector Power Dissipation	0.9	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55-150	°C

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SC2655	TO-92L	Bulk	500pcs/Bag
2SC2655-TA	TO-92L	Tape	2000pcs/Box

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	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	$h_{FE(1)}$	$V_{CE}=2V, I_C=500mA$	70		240	
	$h_{FE(2)}$	$V_{CE}=2V, I_C=1.5A$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1A, I_B=0.05A$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=1A, I_B=0.05A$			1.2	V
Transition frequency	f_T	$V_{CE}=2V, I_C=0.5A$		100		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		30		pF
Switch time	Tune on Time	t_{on}		0.1		μs
	Storage Time	t_{stg}	$V_{CC}=30V, I_C=1A,$ $I_{B1}=-I_{B2}=0.05A$	1		
	Fall Time	t_f		0.1		

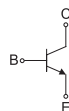
CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	70-140	120-240

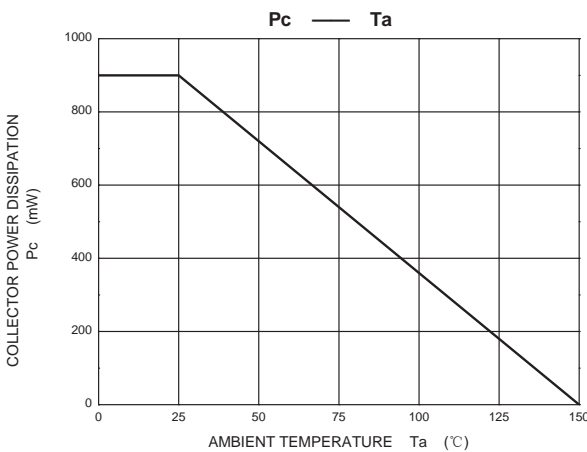
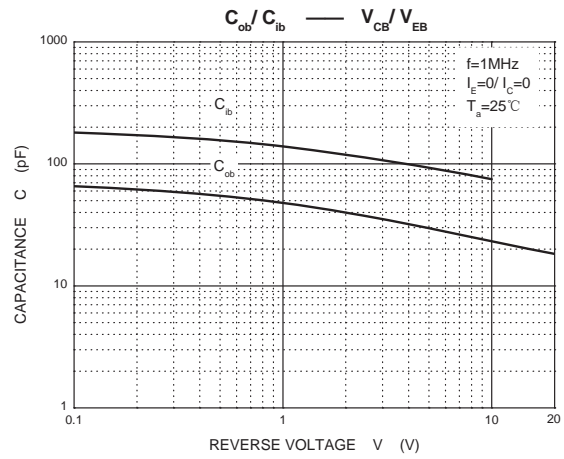
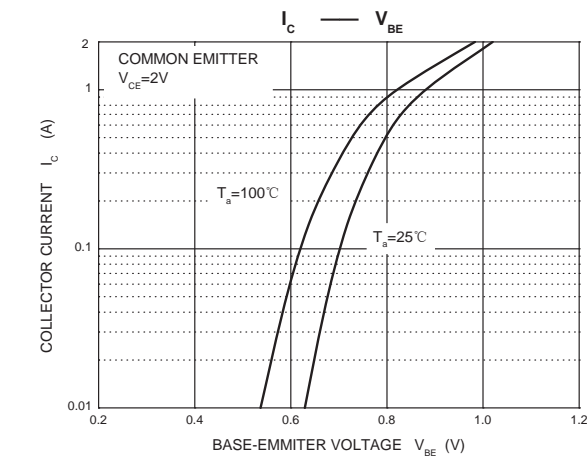
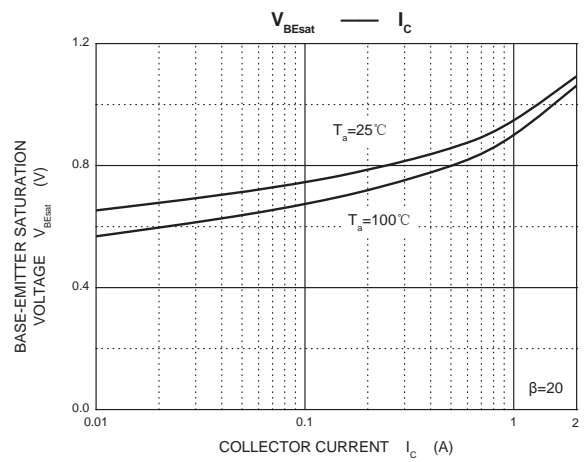
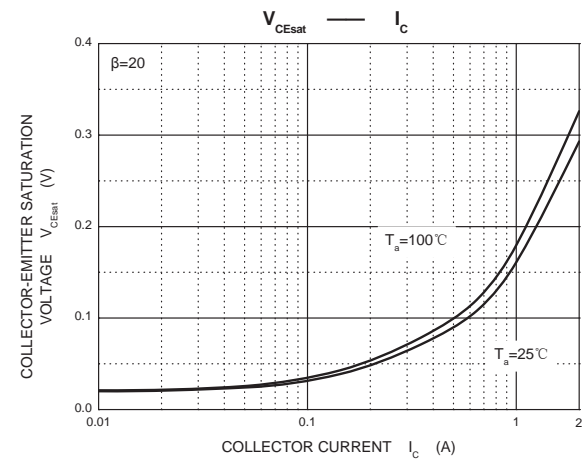
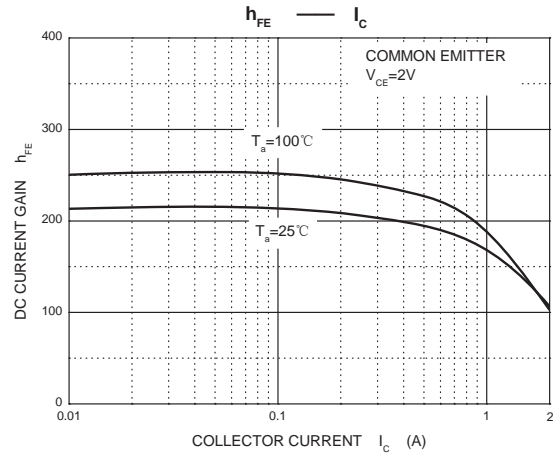
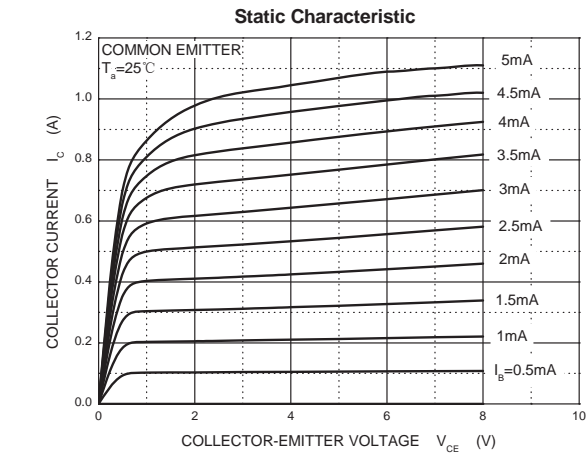
MARKING

Equivalent Circuit

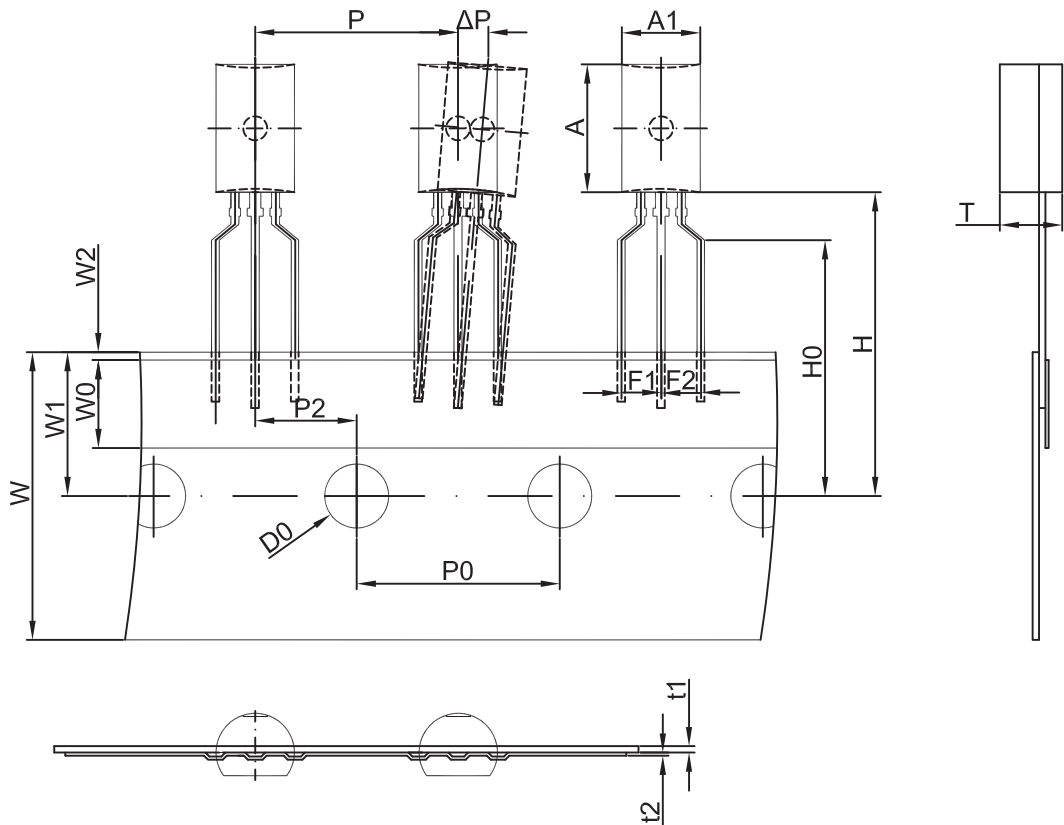
C2655 •XXX	— B	C2655=Device code
	— C	Solid dot = Green molding compound device, if none, the normal device
	— E	XXX=Code
	—	



Typical Characteristics

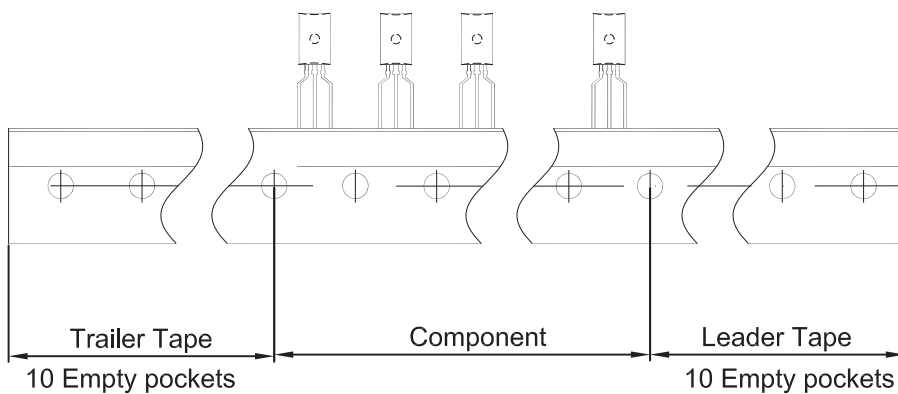


TO-92L PACKAGE TAPING DIMENSION



Dimensions are in millimeter

A1	A	T	P	P0	P2	F1	F2	W
4.9	8.0	3.9	12.7	12.7	6.35	2.5	2.5	18.0
W0	W1	W2	H	H0	D0	t1	t2	ΔP
6.0	9.0	1.0	19.0	16.0	4.0	0.4	0.2	0



Package	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92L	2000 pcs	333×203×42	20,000 pcs	493×400×264