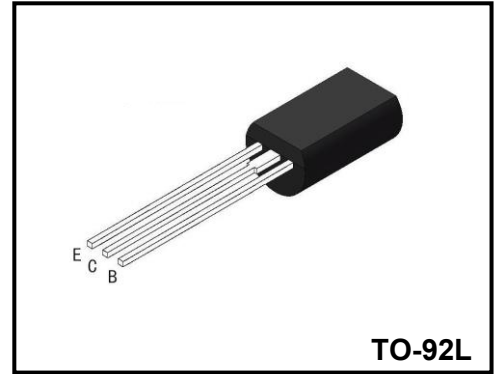


NPN Plastic-Encapsulate Transistors



Power Amplifier & Switching Applications

◆ Low Saturation Voltage : $V_{CE(sat)}=0.5V(Max)$

◆ Complement to 2SA1020

Absolute Maximum Rating (Ta=25°C)

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

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	Value			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	BV_{CBO}	$I_C = 100\mu A, I_E = 0$	50			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = 1mA, I_B = 0$	50			V
Emitter-base breakdown voltage	BV_{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	$h_{FE(1)}$	$V_{CE} = 2V, I_C = 0.5A$	70		240	
	$h_{FE(2)}$	$V_{CE} = 2V, I_C = 1.5A$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1A, I_B = 0.05A$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 1A, I_B = 0.05A$			1.2	V
Transition frequency	f_T	$V_{CE} = 2V, I_B = 0.5A$	50			MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		30		pF

$h_{FE(1)}$ Classification

Classification	2SC2655-O	2SC2655-Y
Range	70-140	120-240

Typical Characteristics

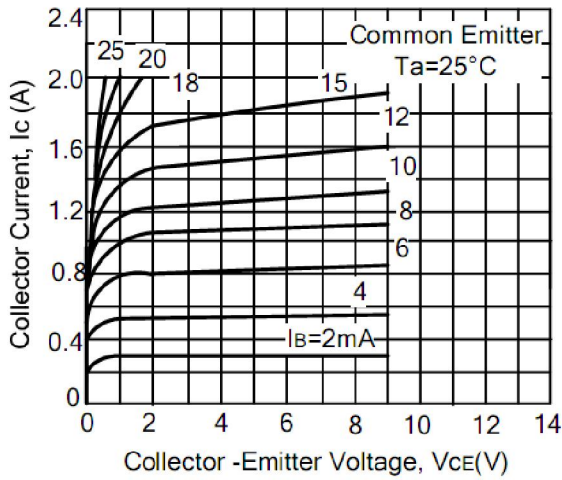


Figure 1. Static Characteristic

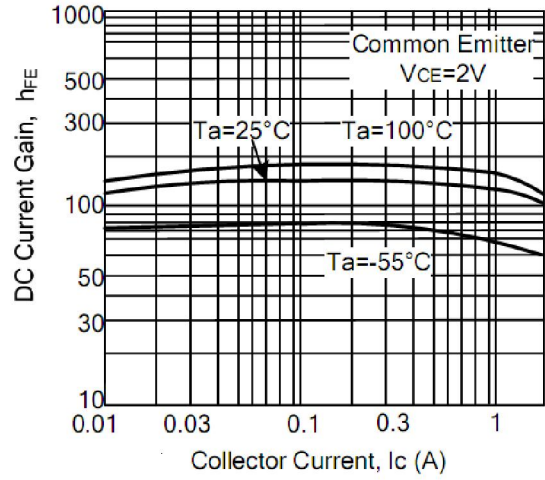


Figure 2. DC current Gain

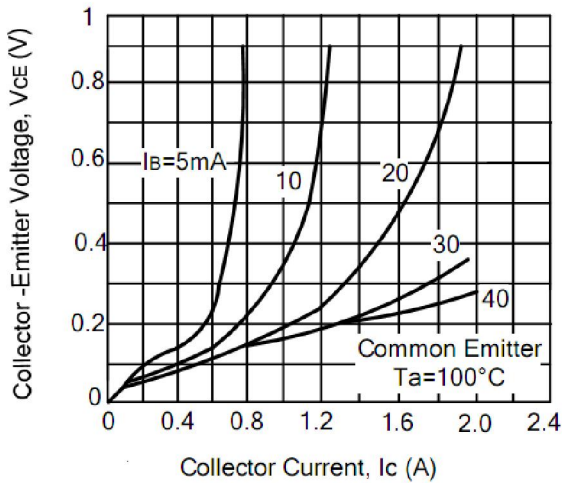


Figure 3. Collector-Emitter Saturation Voltage

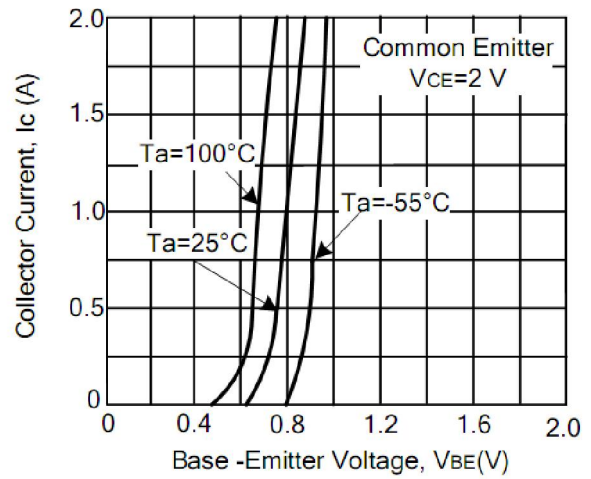


Figure 4. Base-Emitter Saturation Voltage

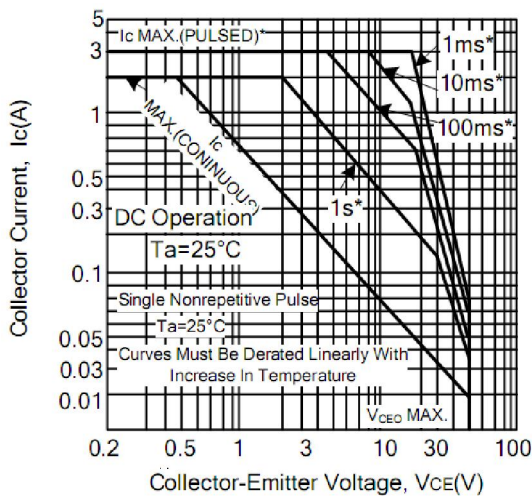


Figure 5. Safe Operating Area

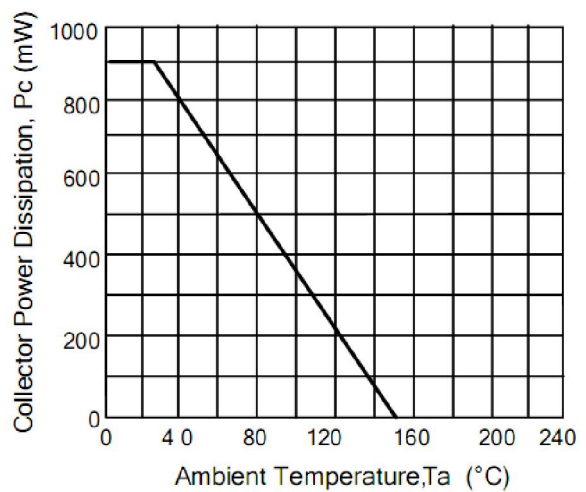


Figure 6. Power Derating

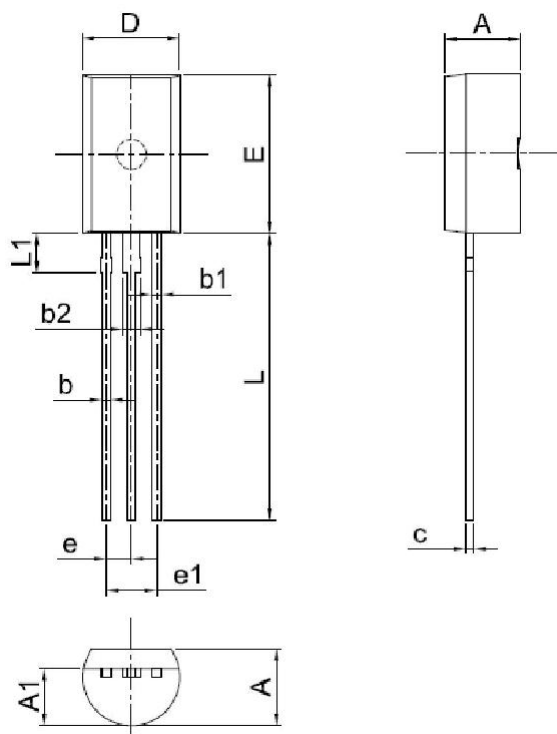
Ordering information

Package	Packing Description	Base Quantity
TO-92L	Bulk	1000pcs/Bag

Package Dimensions

TO-92L

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	3.60	4.00	0.142	0.157
A1	2.20	2.60	0.087	0.102
B	0.40	0.50	0.016	0.020
B1	0.50	0.65	0.020	0.026
C	0.35	0.45	0.014	0.018
D	4.60	5.00	0.181	0.197
E	7.60	8.00	0.299	0.315
E	1.24	1.30	0.049	0.051
E1	2.48	2.60	0.098	0.102
L	13.50	14.50	0.531	0.571
L1	1.50	1.90	0.059	0.075



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