

**JSCJ TO-92MOD Plastic-Encapsulate Transistors****2SC2655** TRANSISTOR (NPN)**FEATURES**

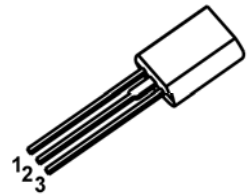
- Low Saturation Voltage: $V_{CE(sat)}=0.5V(\text{Max})(I_C=1A)$
- High Speed Switching Time: $t_{stg}=1\mu s(\text{Typ.})$
- Complementary to 2SA1020

TO-92MOD

1.EMITTER

2.COLLECTOR

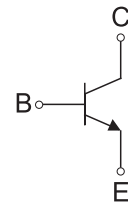
3.BASE

**MARKING**

C2655=Device code

Solid dot = Green molding compound device,
if none, the normal device

XXX=Code

Equivalent Circuit**ORDERING INFORMATION**

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

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	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, T_{stg}	Operation Junction and Storage Temperature Range	-55 to +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

$T_a = 25^\circ\text{C}$ unless otherwise specified

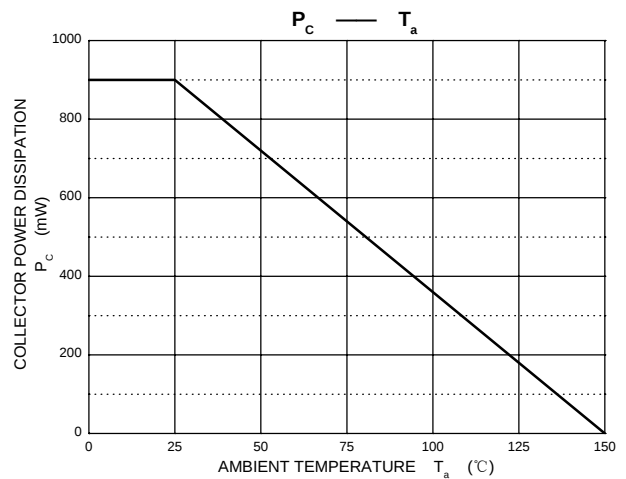
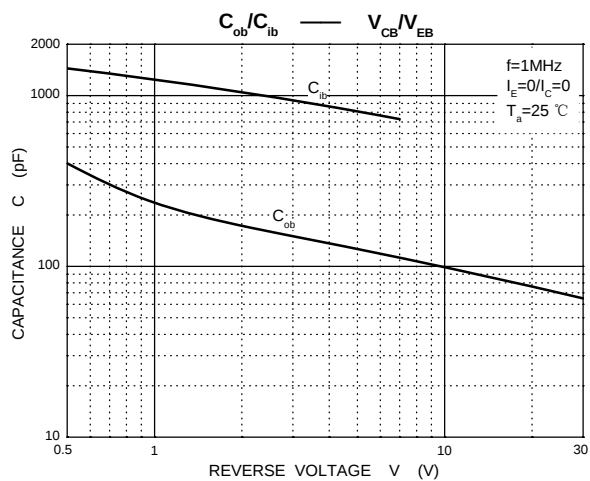
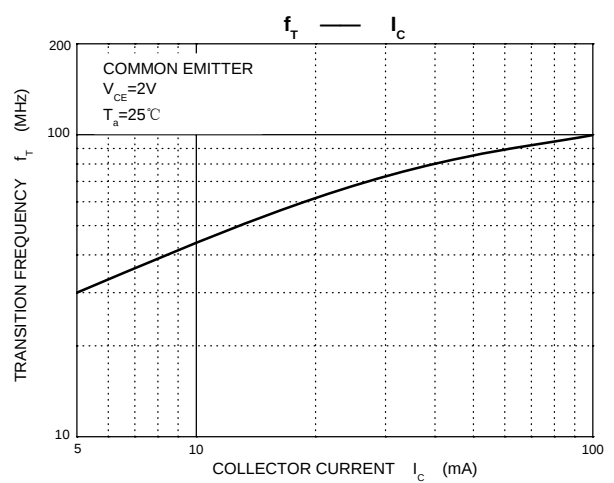
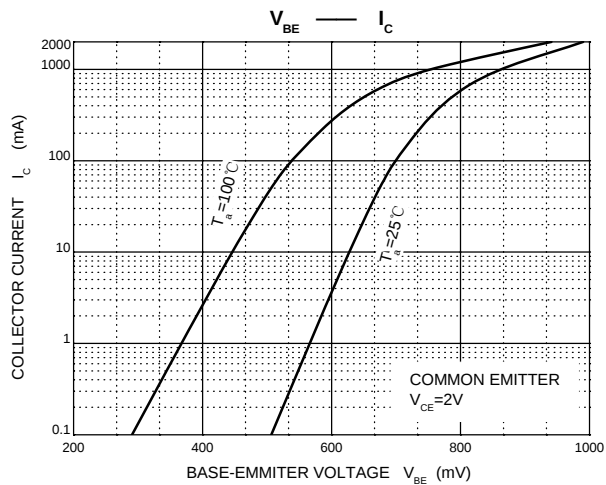
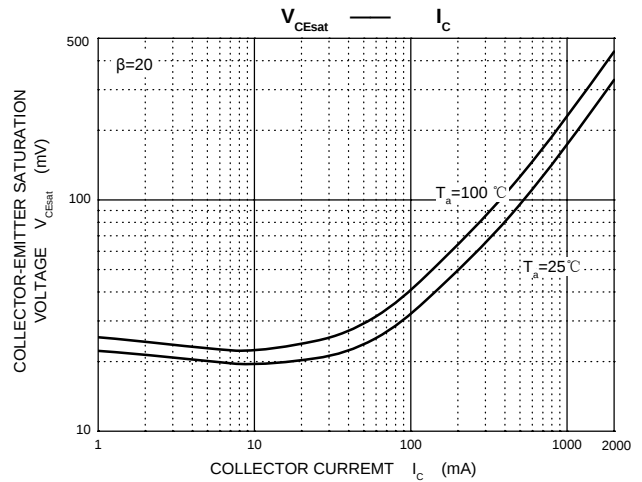
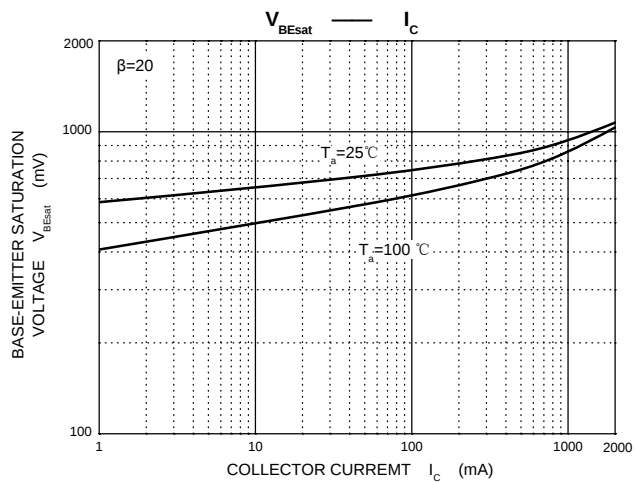
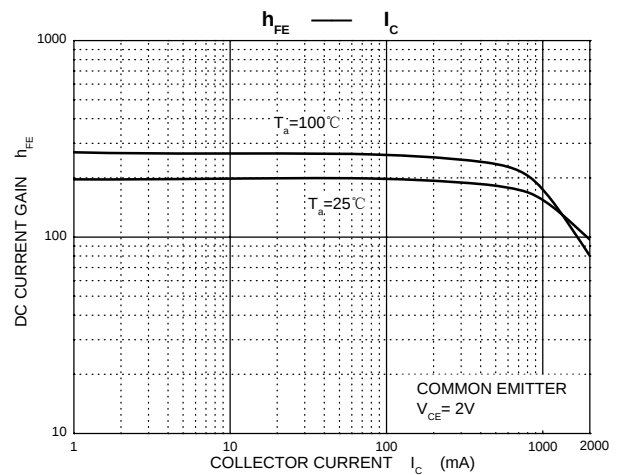
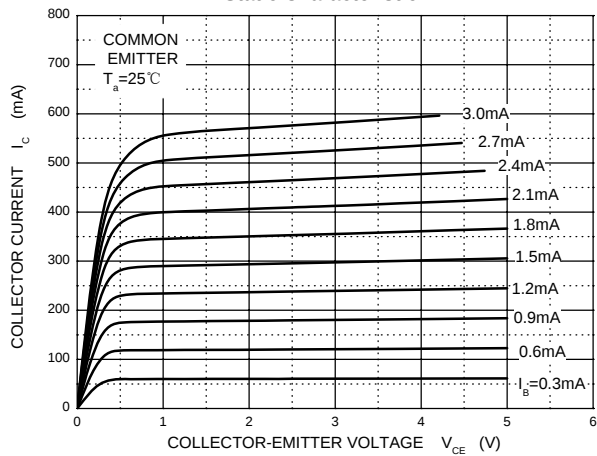
Parameter		Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage		$V_{(BR)CBO}$	$I_C = 100\mu\text{A}, I_E = 0$	50			V
Collector-emitter breakdown voltage		$V_{(BR)CEO}$	$I_C = 10\text{mA}, I_B = 0$	50			V
Emitter-base breakdown voltage		$V_{(BR)EBO}$	$I_E = 100\mu\text{A}, I_C = 0$	5			V
Collector cut-off current		I_{CBO}	$V_{CB} = 50\text{V}, I_E = 0$			1	μA
Emitter cut-off current		I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$			1	μA
DC current gain		$h_{FE(1)}$	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$	70		240	
		$h_{FE(2)}$	$V_{CE} = 2\text{V}, I_C = 1.5\text{A}$	40			
Collector-emitter saturation voltage		$V_{CE(sat)}$	$I_C = 1\text{A}, I_B = 0.05\text{A}$			0.5	V
Base-emitter saturation voltage		$V_{BE(sat)}$	$I_C = 1\text{A}, I_B = 0.05\text{A}$			1.2	V
Transition frequency		f_T	$V_{CE} = 2\text{V}, I_C = 0.5\text{A}$		100		MHz
Collector output capacitance		C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$		30		pF
Switch time	Tune on Time	t_{on}	$V_{CC} = 30\text{V}, I_C = 1\text{A},$ $I_{B1} = -I_{B2} = 0.05\text{A}$		0.1		μs
	Storage Time	t_{stg}			1		
	Fall Time	t_f			0.1		

CLASSIFICATION OF $h_{FE(1)}$

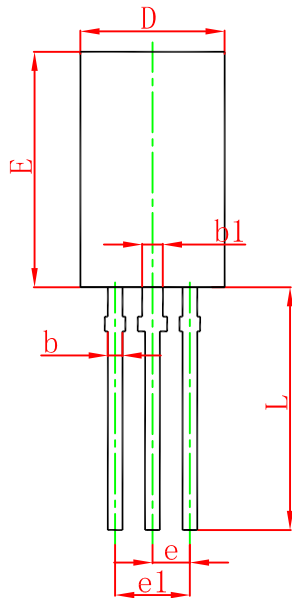
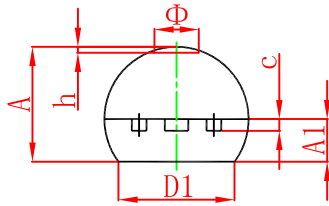
Rank	O	Y
Range	70-140	120-240

Typical Characteristics

Static Characteristic

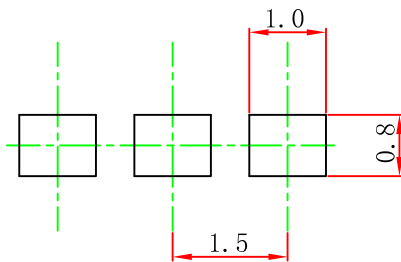


TO-92MOD Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.800	5.000	0.189	0.197
A1	1.730	2.030	0.068	0.080
b	0.440	0.600	0.017	0.024
b1	0.940	1.100	0.037	0.043
c	0.350	0.450	0.014	0.018
D	5.900	6.100	0.232	0.240
D1	4.000		0.157	
E	8.500	8.700	0.335	0.343
e	1.500 TYP.		0.059 TYP.	
e1	2.900	3.100	0.114	0.122
L	13.800	14.200	0.543	0.559
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

TO-92MOD Suggested Pad Layout



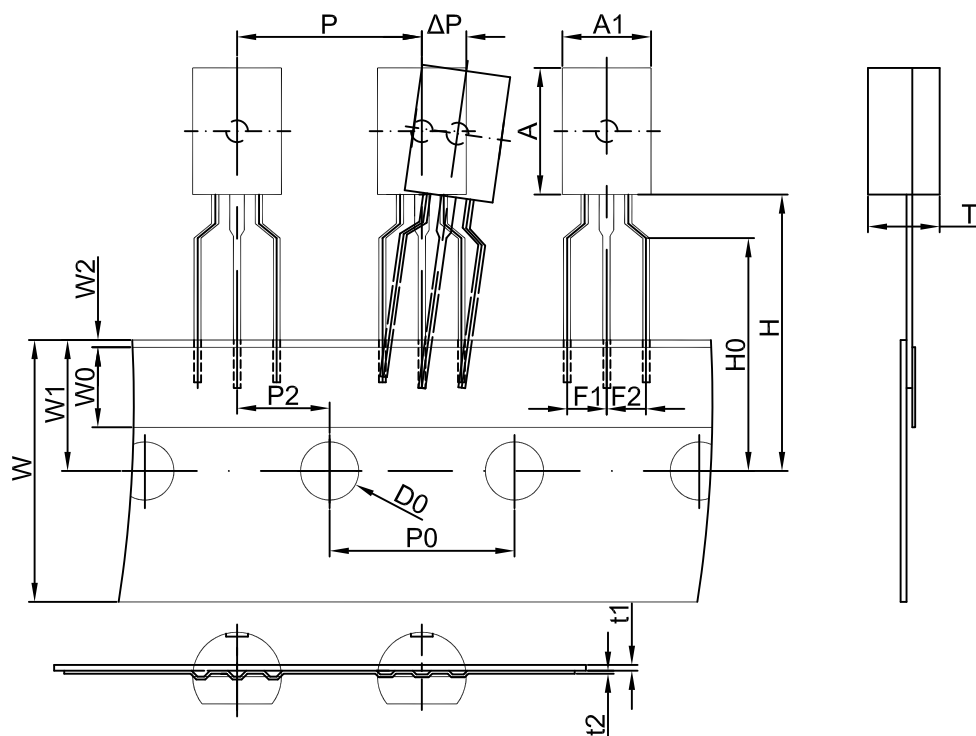
Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

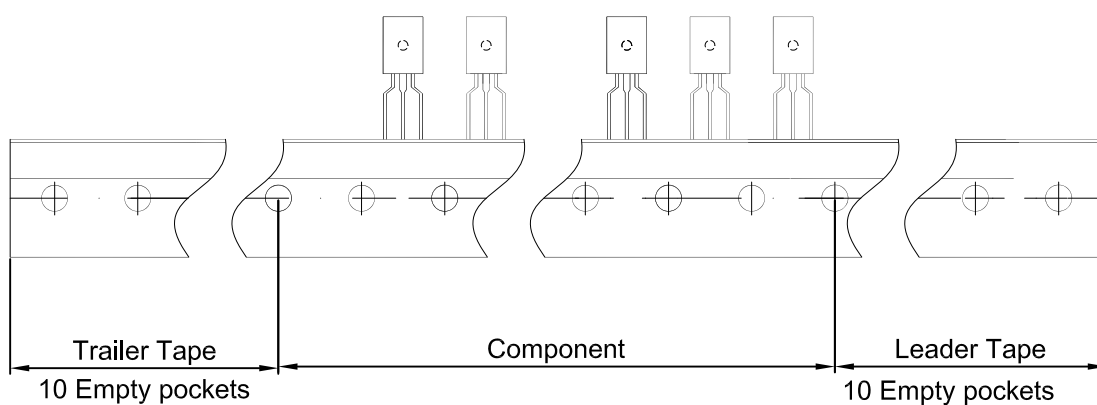
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TO-92MOD PACKAGE TAPING DIMENSION



Dimensions are in millimeter

A1	A	T	P	P0	P2	F1	F2	W
6.0	8.6	4.9	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-92MOD	2000 pcs	333×245×43	20,000 pcs	573×404×266