



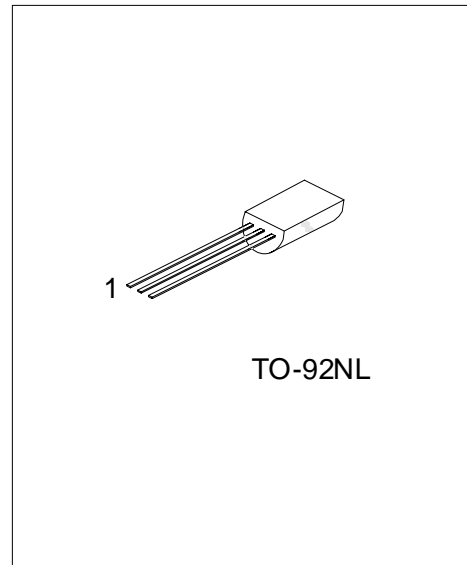
## 2SC2655

## NPN SILICON TRANSISTOR

POWER AMPLIFIER APPLICATIONS  
POWER SWITCHING APPLICATIONS

### ■ FEATURES

- \*Low saturation voltage  
 $V_{CE(SAT)} = 0.5V$  (Max.)
- \*High speed switching time  
 $t_{stg} = 1.0\mu s$  (Typ.)



\*Pb-free plating product number: 2SC2655L

### ■ ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Normal	Lead Free Plating		1	2	3	
2SC2655-x-T9N-B	2SC2655L-x-T9N-B	TO-92NL	E	C	B	Tape Box
2SC2655-x-T9N-K	2SC2655L-x-T9N-K	TO-92NL	E	C	B	Bulk
2SC2655-x-T9N-R	2SC2655L-x-T9N-R	TO-92NL	E	C	B	Tape Reel

<p>2C2655L-x-T9N-K</p>	<p>(1) B: Tape Box, K: Bulk, R: Tape Reel  (2) T9N: TO-92NL  (3) refer to Classification of <math>h_{FE(1)}</math>  (4) L: Lead Free Plating, Blank: Pb/Sn</p>
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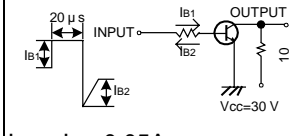
■ ABSOLUTE MAXIMUM RATINGS ( Ta=25°C ,unless otherwise specified )

PARAMETER	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	50	V
Collector-Emitter Voltage	$V_{CEO}$	50	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	2	A
Collector Current(Pulse)	$I_{cp}^*$	3	A
Base Current	$I_B$	0.5	A
Collector Power Dissipation	$P_C$	900	mW
Junction Temperature	$T_J$	150	°C
Storage Temperature	$T_{STG}$	-55 ~ +150	°C

Note: \* PW 16ms, Duty Cycle 50%.

1. Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

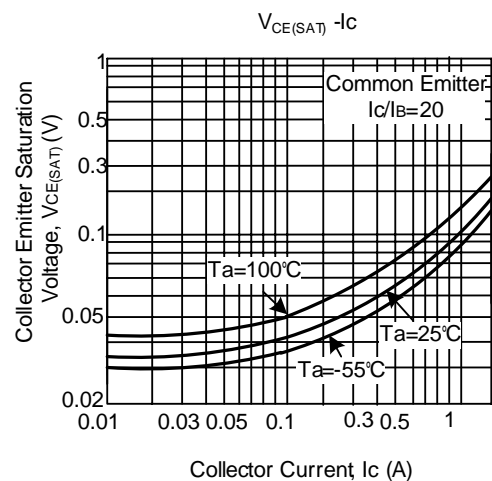
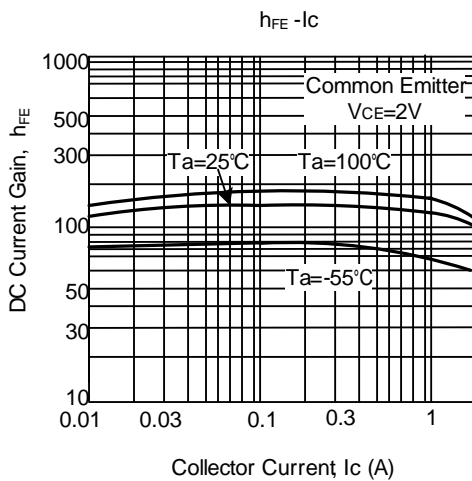
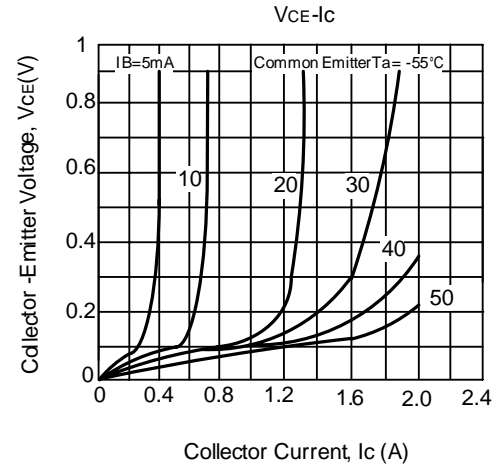
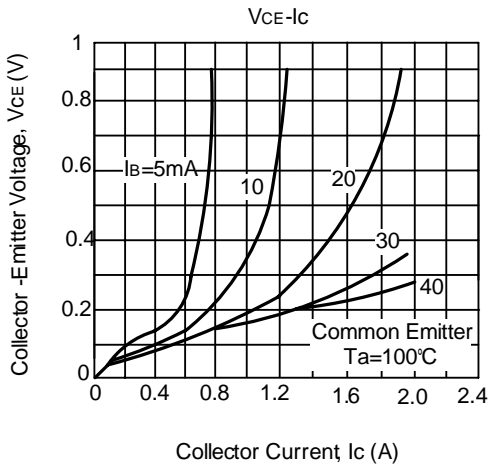
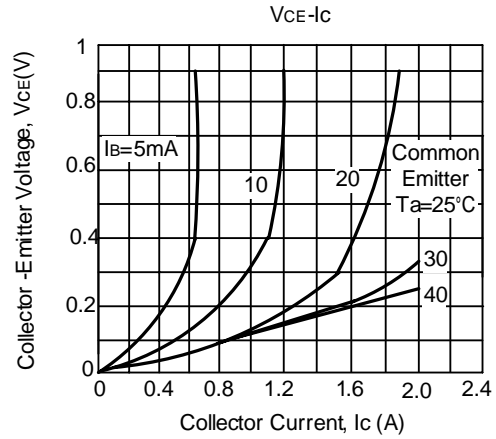
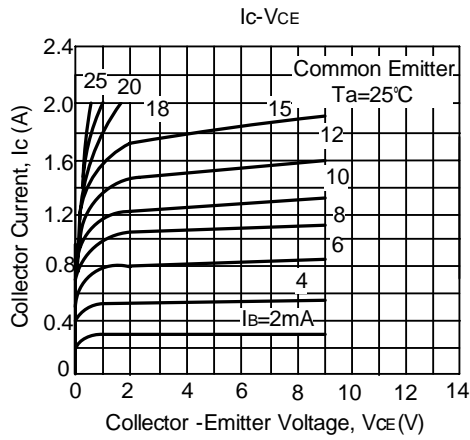
■ ELECTRICAL CHARACTERISTICS(Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=10mA, I_B=0$	50			V
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=50V, I_E=0$			1.0	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			1.0	$\mu A$
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	$f_T$	$V_{CE}=2V, I_C=0.5A$		100		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$		30		pF
Switching Time(Turn-on Time)	$t_{ON}$	 <p><math>I_{B1} = -I_{B2} = 0.05A</math> DUTY CYCLE 1%</p>		0.1		$\mu S$

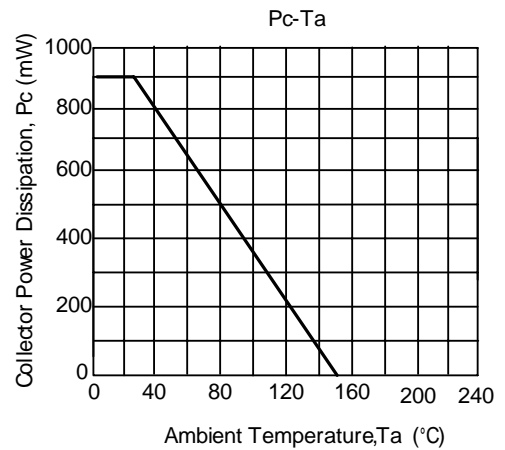
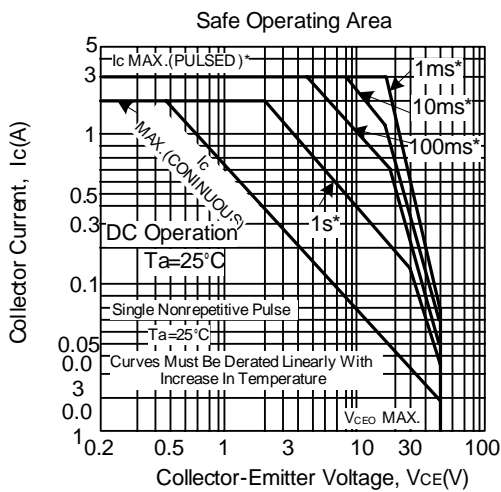
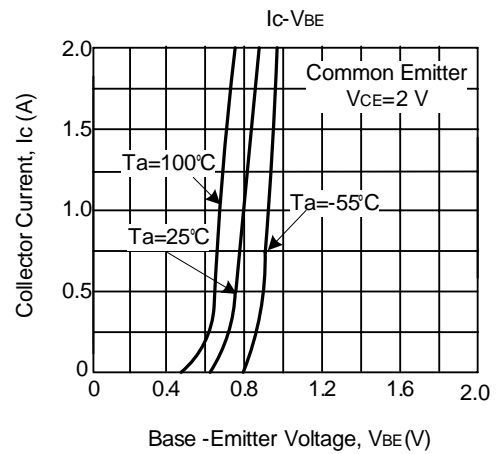
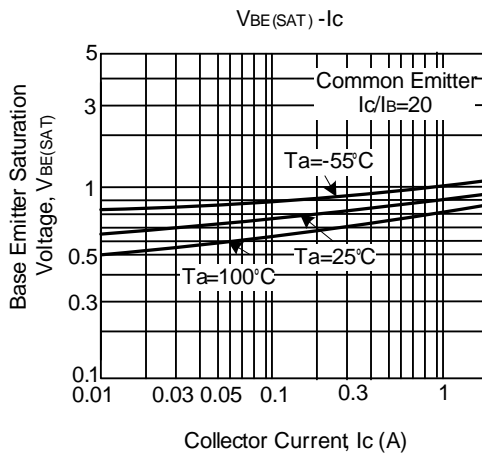
■ CLASSIFICATION OF  $h_{FE(1)}$

RANK	O	Y
RANGE	70-140	120-240

## TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS(Cont.)



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