



2SC2655

NPN SILICON TRANSISTOR

POWER AMPLIFIER APPLICATIONS POWER SWITCHING APPLICATIONS

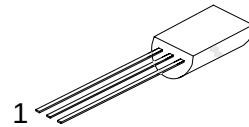
■ FEATURES

*Low saturation voltage

$$V_{CE(SAT)} = 0.5V \text{ (Max.)}$$

*High speed switching time

$$t_{stg} = 1.0\mu s \text{ (Typ.)}$$



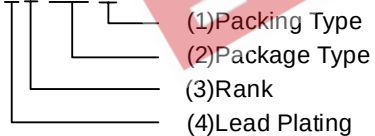
TO-92NL

*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

2C2655L-x-T9N-K



- (1) B: Tape Box, K: Bulk, R: Tape Reel
- (2) T9N: TO-92NL
- (3) refer to Classification of $h_{FE(1)}$
- (4) L: Lead Free Plating, Blank: Pb/Sn

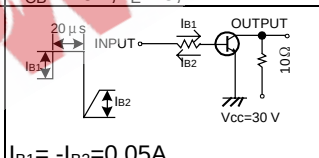
■ **ABSOLUTE MAXIMUM RATINGS** (Ta=25°C, unless otherwise specified)

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

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.

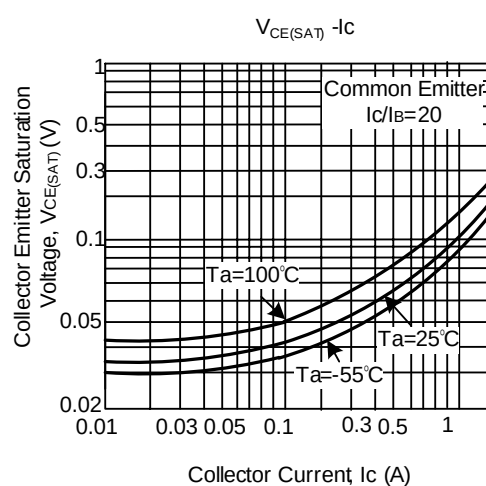
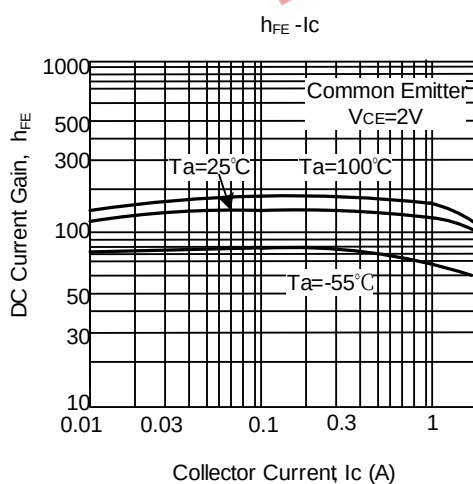
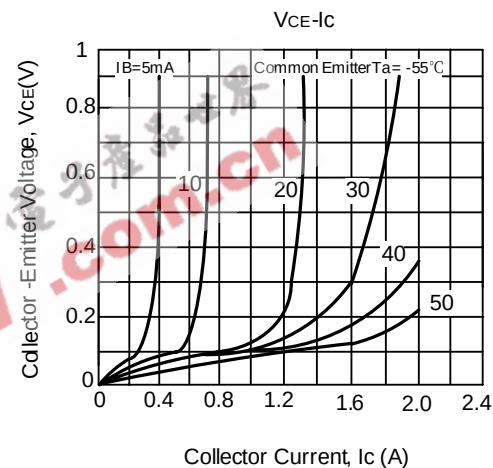
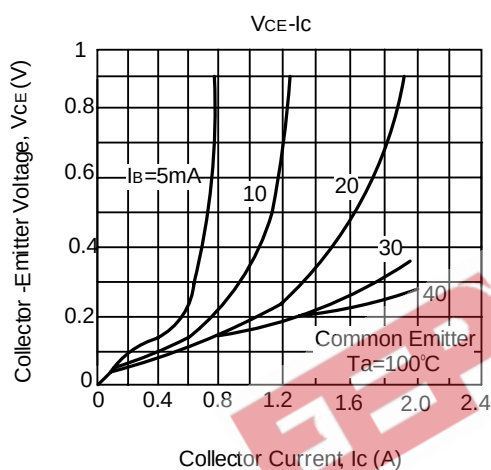
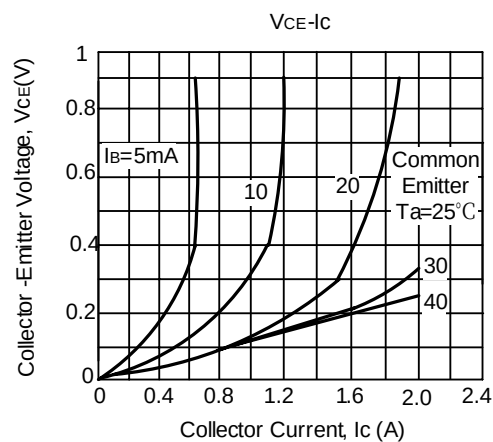
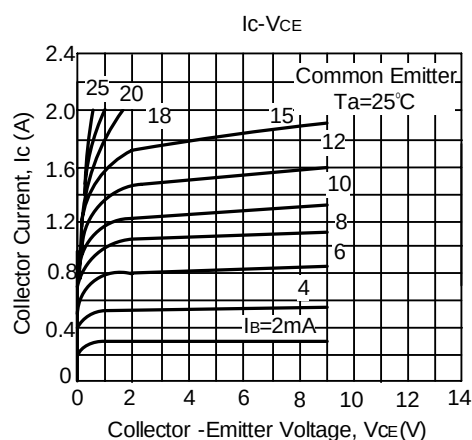
■ **ELECTRICAL CHARACTERISTICS**(Ta=25°C, unless otherwise specified)

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	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			1.0	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	$V_{CE} = 2V, I_C = 0.5A$		100		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		30		pF
Switching Time(Turn-on Time)	t_{ON}	 $I_{B1} = -I_{B2} = 0.05A$ DUTY CYCLE $\leq 1\%$		0.1		μs

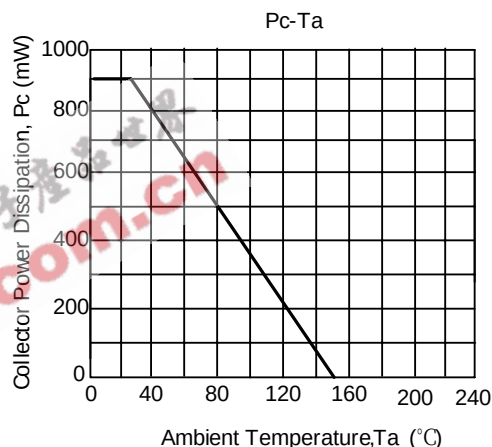
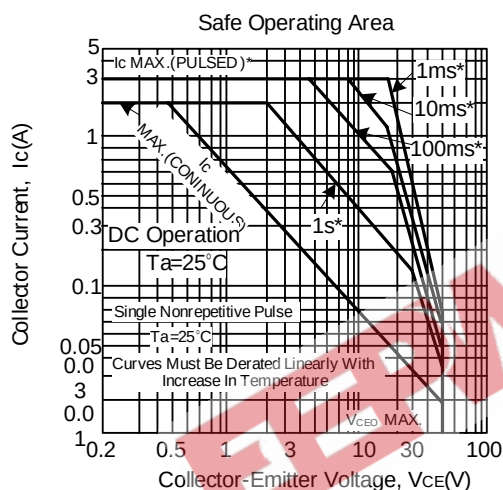
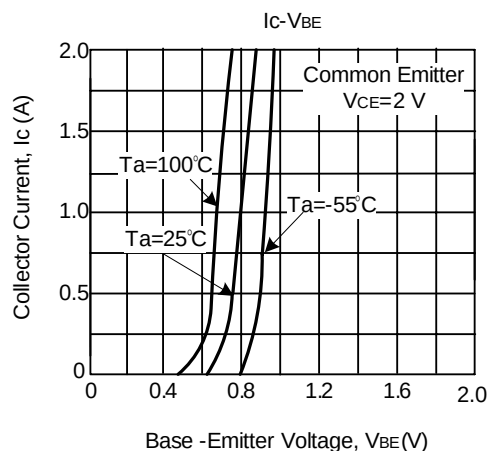
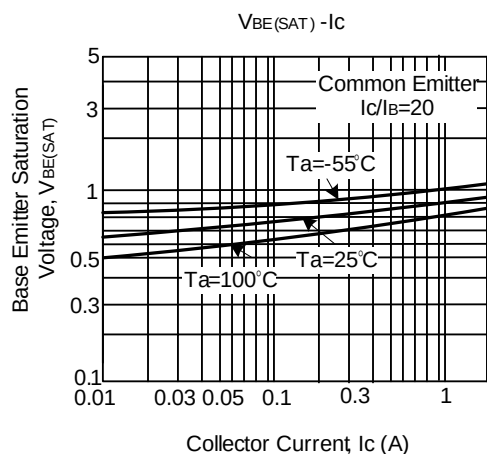
■ **CLASSIFICATION OF $h_{FE(1)}$**

RANK	O	Y
RANGE	70-140	120-240

■ TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS(Cont.)



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