



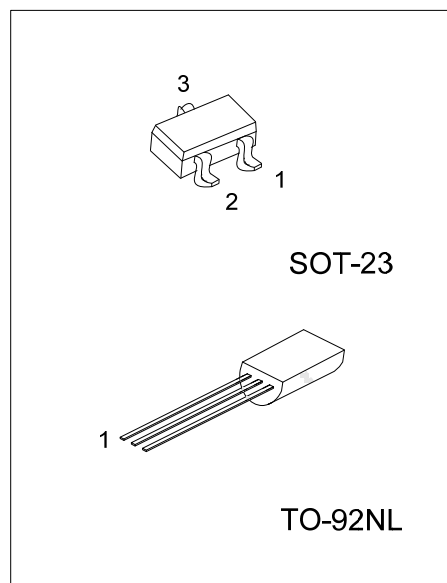
2SC2655

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.)

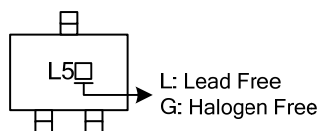


■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SC2655L-x-AE3-R	2SC2655Gx-AE3-R	SOT-23	E	B	C	Tape Reel
2SC2655L-x-T9N-B	2SC2655Gx-T9N-B	TO-92NL	E	C	B	Tape Box
2SC2655L-x-T9N-K	2SC2655Gx-T9N-K	TO-92NL	E	C	B	Bulk
2SC2655L-x-T9N-R	2SC2655Gx-T9N-R	TO-92NL	E	C	B	Tape Reel

2C2655L-x-AE3-R (1) Packing Type (2) Package Type (3) Rank (4) Lead Free	(1) B: Tape Box, K: Bulk, R: Tape Reel (2) AE3: SOT-23, T9N: TO-92NL (3) refer to Classification of $h_{FE(1)}$ (4) G: Halogen Free, L: Lead Free
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■ MARKING (FOR SOT-23 PACKAGE)



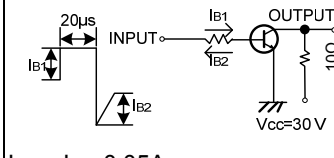
■ **ABSOLUTE MAXIMUM RATINGS** ($T_A=25^{\circ}\text{C}$,unless otherwise specified)

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) (Note 1)	I_{CP}	3	A
Base Current	I_B	0.5	A
Collector Power Dissipation	SOT-23	350	mW
	TO-92NL	900	
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

Note: 1. $P_W \leq 16\text{ms}$, Duty Cycle $\leq 50\%$.

2. 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.

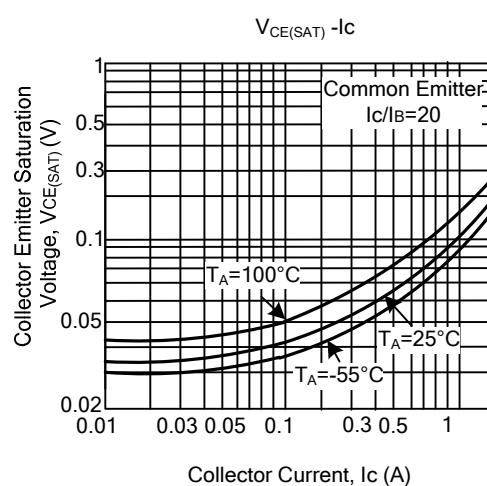
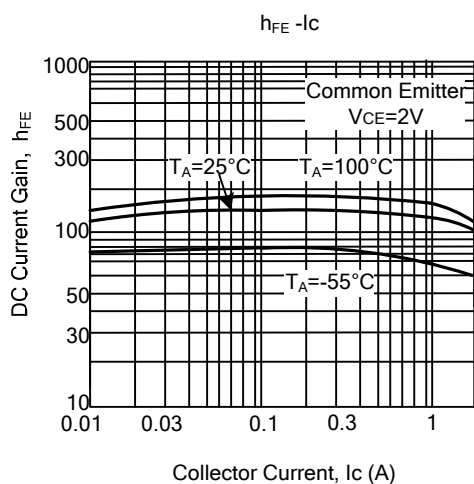
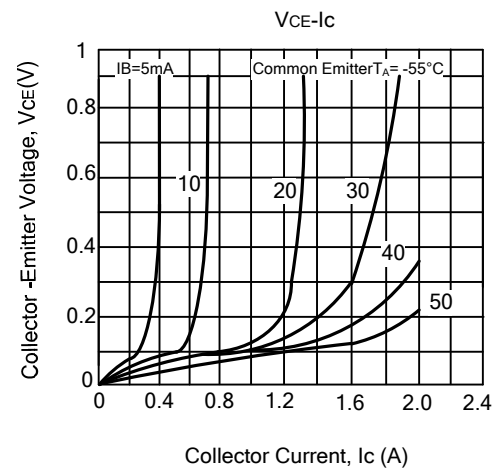
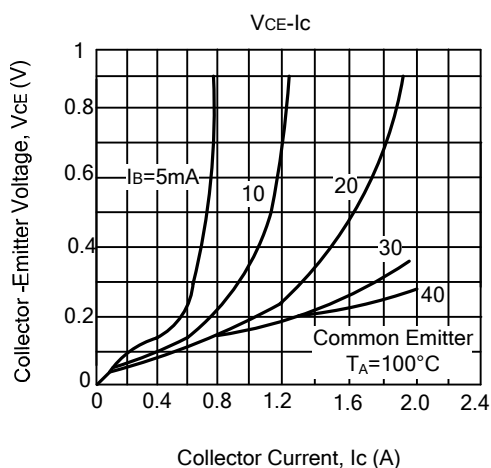
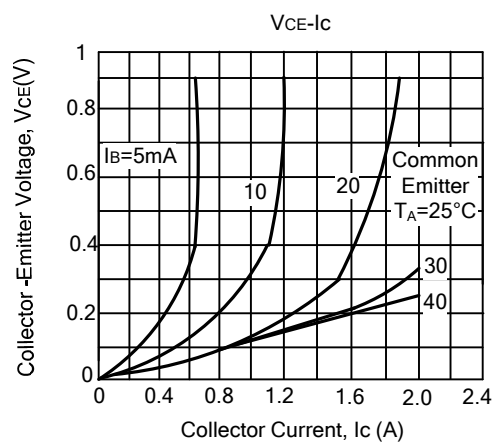
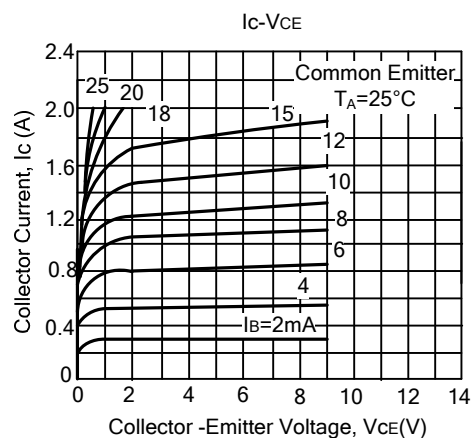
■ **ELECTRICAL CHARACTERISTICS**($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Emitter Breakdown Voltage	BV_{CEO}	$I_C=10\text{mA}$, $I_B=0$	50			V
Collector Cut-off Current	I_{CBO}	$V_{CB}=50\text{V}$, $I_E=0$			1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5\text{V}$, $I_C=0$			1.0	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=2\text{V}$, $I_C=0.5\text{A}$	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
Switching Time(Turn-on Time)	t_{ON}	 $I_{B1} = -I_{B2} = 0.05\text{A}$ DUTY CYCLE $\leq 1\%$		0.1		μS

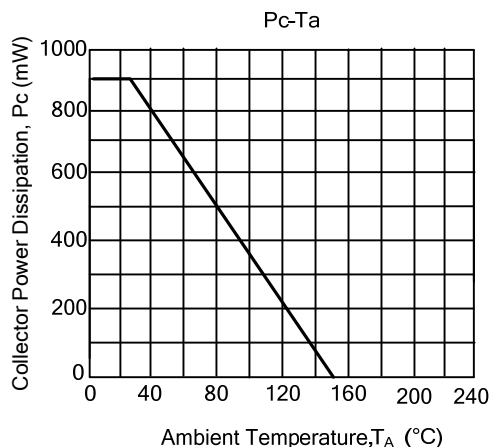
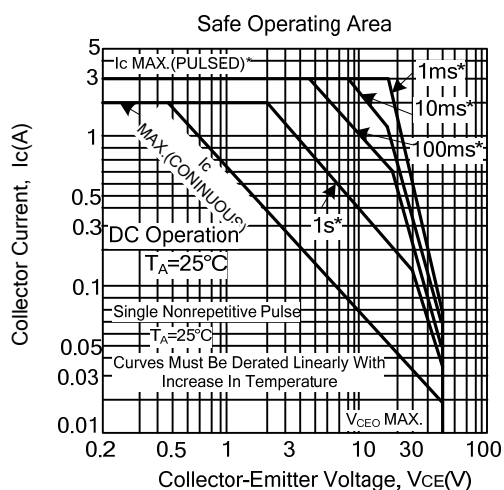
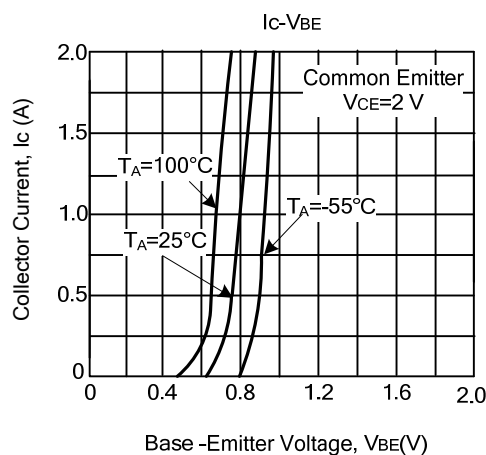
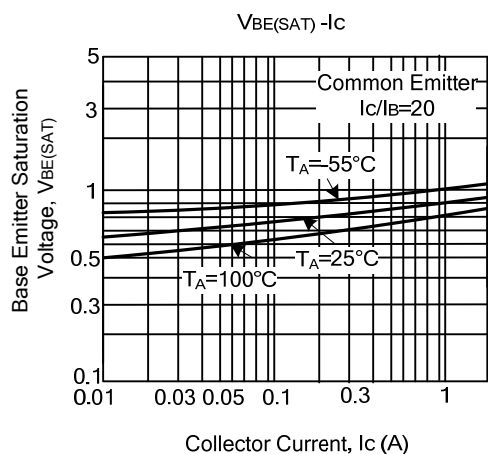
■ **CLASSIFICATION OF $h_{FE(1)}$**

RANK	O	Y
RANGE	70-140	120-240

■ TYPICAL CHARACTERISTICS



TYPICAL CHARACTERISTICS(Cont.)



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