



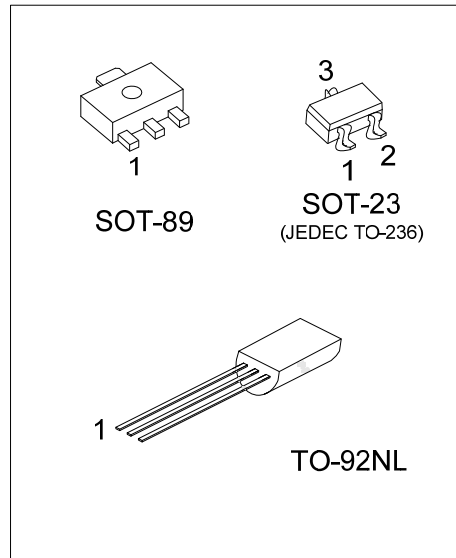
2SC2655

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	
2SC2655G-x-AB3-R	2SC2655G-x-AB3-R	SOT-89	B	C	E	Tape Reel
2SC2655G-x-AE3-R	2SC2655G-x-AE3-R	SOT-23	B	E	C	Tape Reel
2SC2655L-x-T9N-B	2SC2655G-x-T9N-B	TO-92NL	E	C	B	Tape Box
2SC2655L-x-T9N-K	2SC2655G-x-T9N-K	TO-92NL	E	C	B	Bulk

Note: Pin Assignment: B: Base C: Collector E: Emitter

<p>2C2655G-x-AB3-R</p> <p>(1)Packing Type (2)Package Type (3)Rank (4)Green Package</p>	<p>(1) B: Tape Box, K: Bulk, R: Tape Reel (2) AB3: SOT-89, AE3: SOT-23, T9N: TO-92NL (3) refer to Classification of h_{FE1} (4) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING

SOT-23	SOT-89	TO-92NL
<p>L: Lead Free G: Halogen Free</p>	<p>□□□□ → Date Code 2SC2655 □ → L: Lead Free G: Halogen Free</p>	<p>UTC 2SC2655 □ □□□□</p> <p>L: Lead Free G: Halogen Free □□□□ → Date Code</p>

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

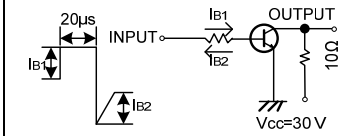
PARAMETER		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	50	V
Collector-Emitter Voltage		V_{CEO}	50	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current		I_C	2	A
Collector Current (Pulse) (Note 2)		I_{CP}	3	A
Base Current		I_B	0.5	A
Collector Power Dissipation	SOT-23	P_C	350	mW
	SOT-89		500	
	TO-92NL		900	
Junction Temperature		T_J	+150	$^\circ\text{C}$
Storage Temperature		T_{STG}	-55 ~ +150	$^\circ\text{C}$

Notes: 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.

2. $P_W \leq 16\text{ms}$, Duty Cycle $\leq 50\%$.

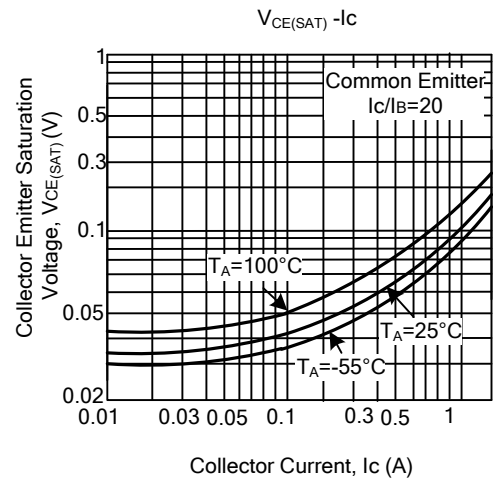
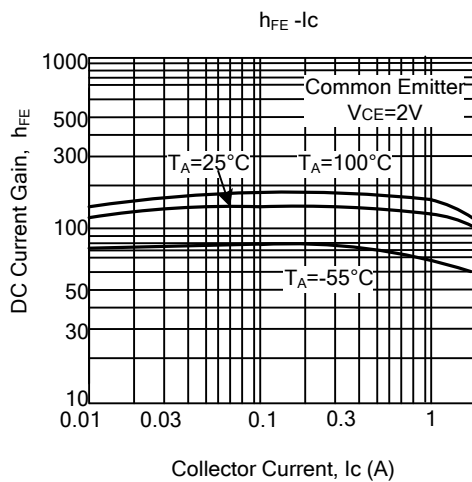
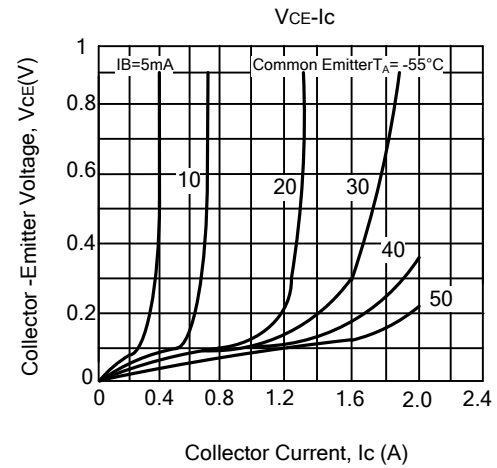
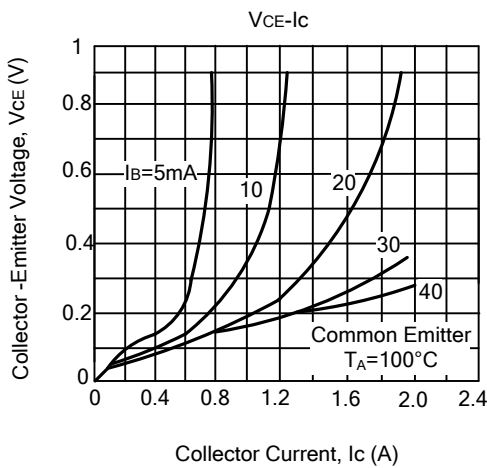
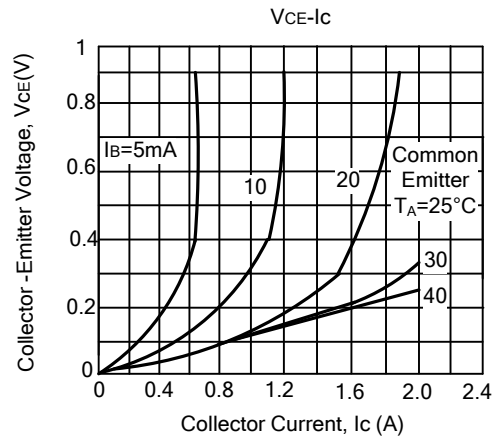
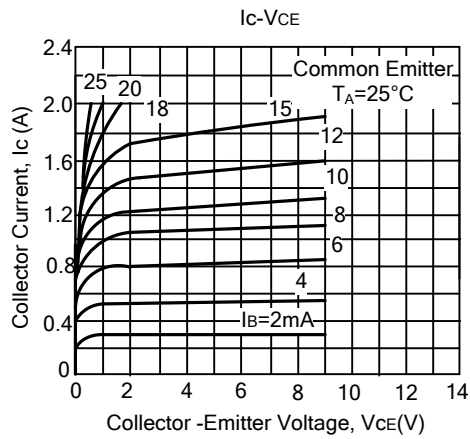
■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector to Base Breakdown Voltage	BV_{CBO}	$I_C=10\mu\text{A}$, $I_E=0$	50			V
Collector to Emitter Breakdown Voltage	BV_{CEO}	$I_C=10\text{mA}$, $I_B=0$	50			V
Emitter to Base Breakdown Voltage	BV_{EBO}	$I_E=10\mu\text{A}$, $I_C=0$	5			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_{FE1}	$V_{CE}=2\text{V}$, $I_C=0.5\text{A}$	70		240	
	h_{FE2}	$V_{CE}=2\text{V}$, $I_C=1.5\text{A}$	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}	 <p>$I_{B1} = -I_{B2} = 0.05\text{A}$ DUTY CYCLE $\leq 1\%$</p>		0.1		μS

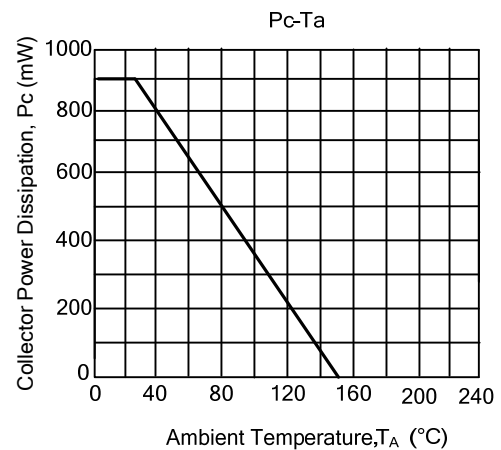
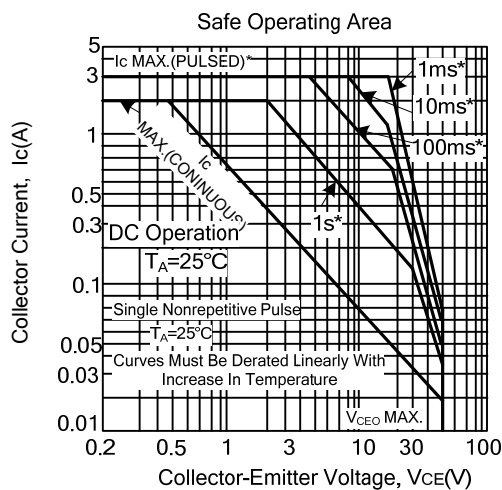
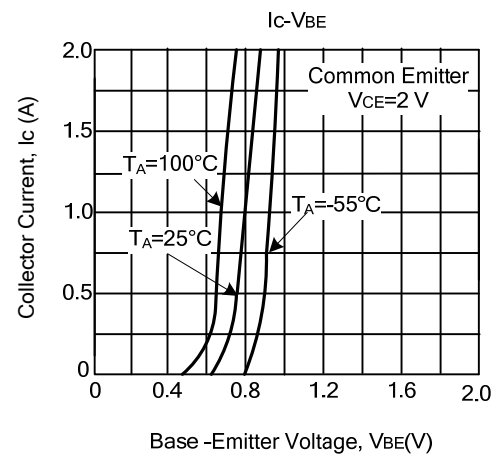
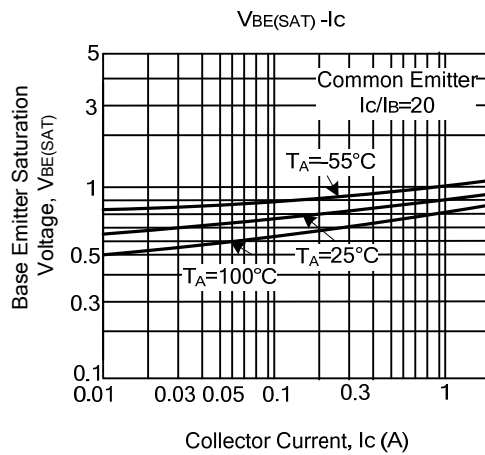
■ CLASSIFICATION OF h_{FE1}

RANK	O	Y
RANGE	70-140	120-240

TYPICAL CHARACTERISTICS



TYPICAL CHARACTERISTICS (Cont.)



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