



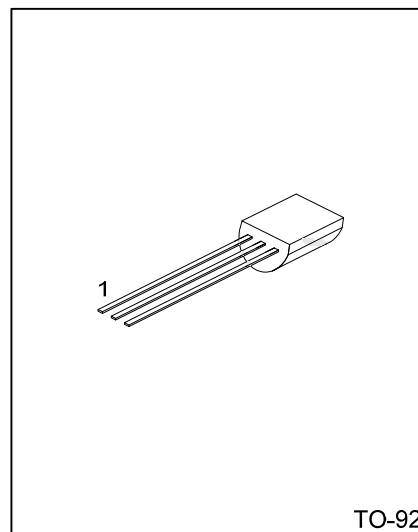
2SA1015

PNP SILICON TRANSISTOR

LOW FREQUENCY PNP AMPLIFIER TRANSISTOR

■ FEATURES

- * Collector-Emitter Voltage: $BV_{CEO} = -50V$
- * Collector Current up to 150mA
- * High h_{FE} Linearity
- * Complement to UTC 2SC1815



Lead-free: 2SA1015L
Halogen-free: 2SA1015G

■ ORDERING INFORMATION

Ordering Number			Package	Pin Assignment			Packing
Normal	Lead Free Plating	Halogen Free		1	2	3	
2SA1015-x-T92-B	2SA1015L-x-T92-B	2SA1015G-x-T92-B	TO-92	E	C	B	Tape Box
2SA1015-x-T92-K	2SA1015L-x-T92-K	2SA1015G-x-T92-K	TO-92	E	C	B	Bulk

<p>2SA1015L-x-T92-B</p>	<p>(1) B: Tape Box, K: Bulk</p> <p>(2) T92: TO-92</p> <p>(3) x: refer to Classification of h_{FE}</p> <p>(4) G: Halogen Free, L: Lead Free Plating, Blank: Pb/Sn</p>
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■ ABSOLUTE MAXIMUM RATING (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	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	-150	mA
Base Current	I_B	-50	mA
Collector Dissipation	P_C	400	mW
Junction Temperature	T_J	125	°C
Storage Temperature	T_{STG}	-55 ~ +125	°C

Note: 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.

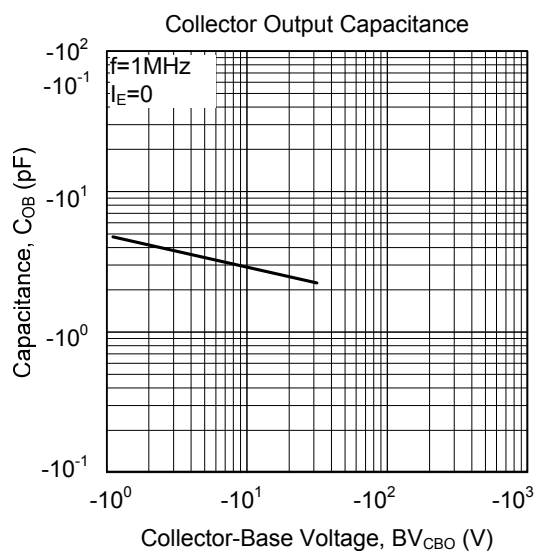
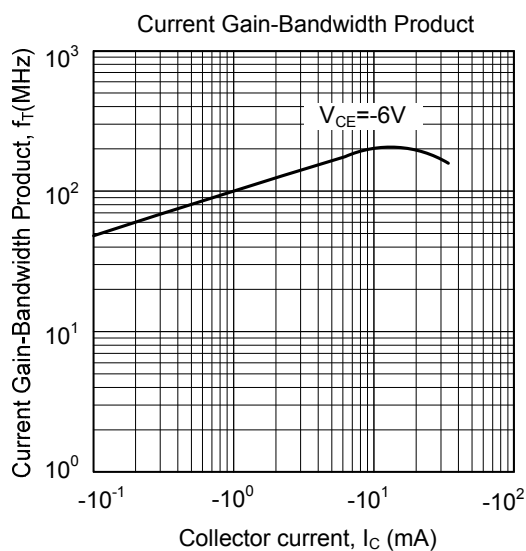
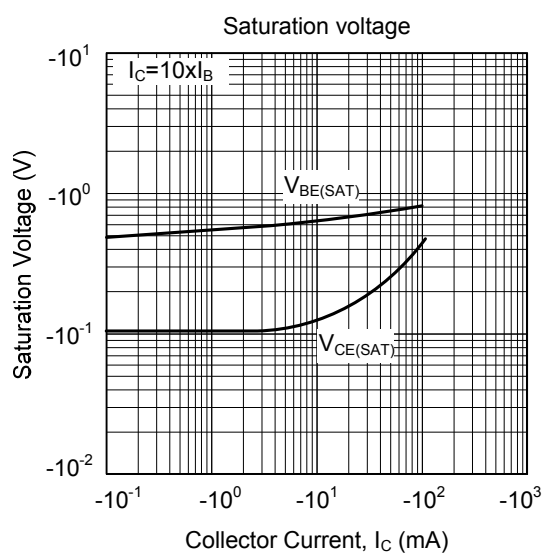
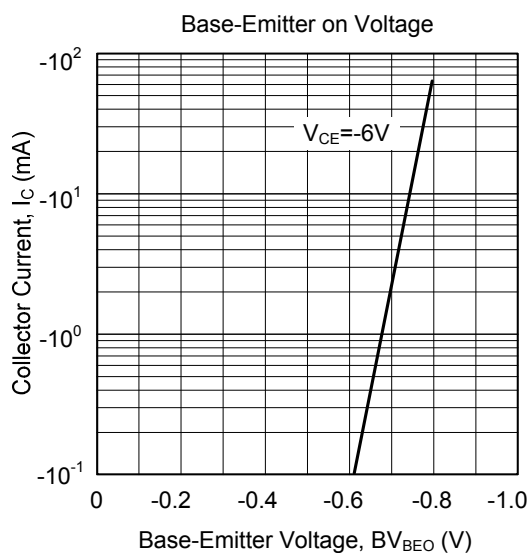
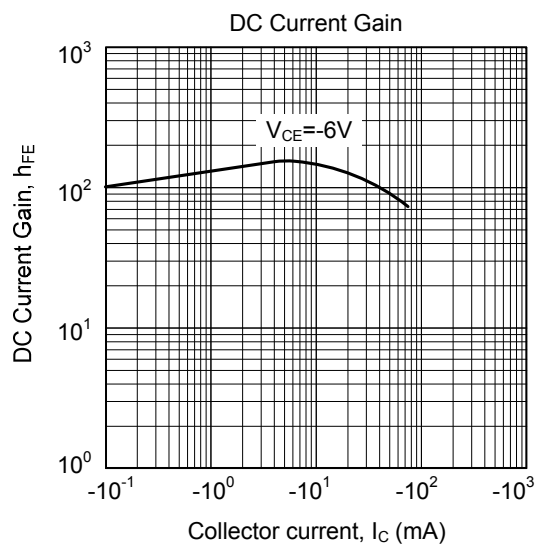
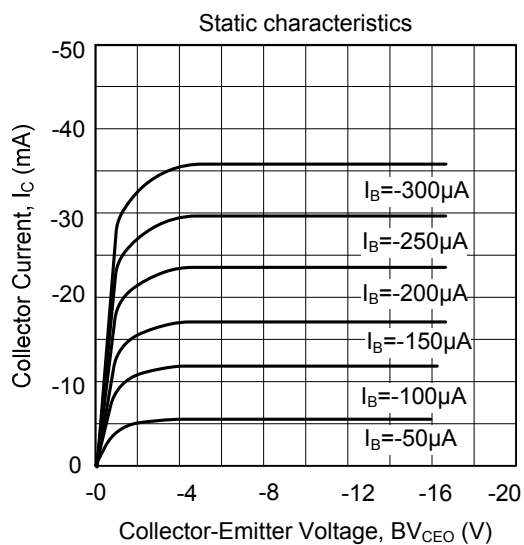
■ ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = -100\mu A, I_E = 0$	-50			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = -10mA, I_B = 0$	-50			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -10\mu A, I_C = 0$	-5			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -50V, I_E = 0$			-100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-100	nA
DC Current Gain	h_{FE1}	$V_{CE} = -6V, I_C = -2mA$	120		700	
	h_{FE2}	$V_{CE} = -6V, I_C = -150mA$	25			
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -100mA, I_B = -10mA$		-0.1	-0.3	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C = -100mA, I_B = -10mA$			-1.1	V
Output Capacitance	C_{OB}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		4.0	7.0	pF
Current Gain Bandwidth Product	f_T	$V_{CE} = -10V, I_C = -1mA$	80			MHz
Noise Figure	NF	$V_{CE} = -6V, I_C = -0.1mA, R_G = 1k\Omega, f = 100Hz$		0.5	6	dB

■ CLASSIFICATION OF h_{FE1}

RANK	Y	GR	BL
RANGE	120-240	200-400	350-700

■ TYPICAL CHARACTERISTICS



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