

■ PRODUCT CHARACTERISTICS

BVCBO	-100
BVCEO	-100
IC	-6

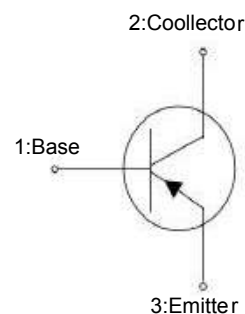
■ DESCRIPTION

- High Voltage: $V_{CEV} = -100V(\text{Min})$
- Fast Switching Speed
- Low Saturation Voltage

■ APPLICATIONS

- Designed for use in horizontal deflection output stages of TV's and CRT's

Symbol



TO-252

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

PARAMETER		SYMBOL	RATING	UNIT
Collector Base Voltage		V_{CBO}	-100	V
Collector to Emitter Voltage		V_{CEO}	-100	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current	DC	I_C	-6	A
	Pulse		-10	A
Base Current		I_B	-2	A
Collector Dissipation		P_C	65	W
Junction Temperature		T_J	150	$^\circ\text{C}$
Storage Temperature		T_{STG}	-65 ~ +150	$^\circ\text{C}$

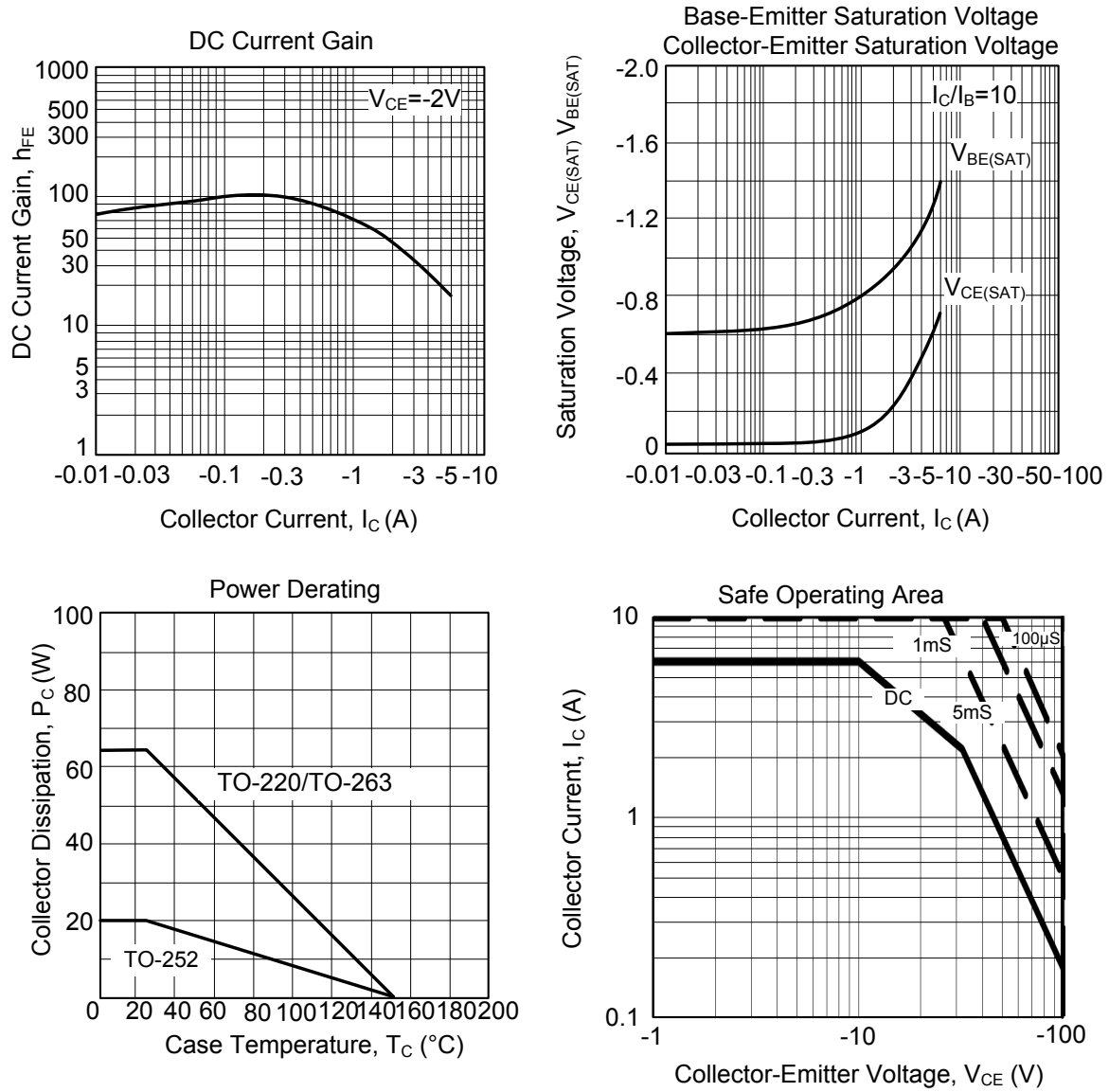
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Emitter Base Breakdown Voltage	BV_{EBO}	$I_E = -100\ \mu\text{A}$, $I_C = 0$	-5	-	-	V
Collector Base Breakdown Voltage	BV_{CBO}	$I_C = -100\ \mu\text{A}$, $I_E = 0$	-100	-	-	V
Collector Emitter Sustaining Voltage (Note)	BV_{CEO}	$I_C = -30\text{mA}$, $I_B = 0$	-	-	-	V
Collector Cutoff Current	I_{CEO}	$V_{CE} = -60\text{V}$, $I_B = 0$	-	-	-0.7	mA
Collector Cutoff Current	I_{CES}	$V_{CE} = -100\text{V}$, $V_{EB} = 0$	-	-	-400	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -5\text{V}$, $I_C = 0$	-	-	-1	mA
Collector-Emitter Saturation Voltage (Note)	$V_{CE(SAT)}$	$I_C = -6\text{A}$, $I_B = -600\text{mA}$	-	-	-1.5	V
Base-Emitter On Voltage (Note)	$V_{BE(ON)}$	$I_C = -6\text{A}$, $V_{CE} = -4\text{V}$	-	-	-2	V
DC Current Gain (Note)	h_{FE1}	$I_C = -300\text{mA}$, $V_{CE} = -4\text{V}$	30	-	-	-
	h_{FE2}	$I_C = -3\text{A}$, $V_{CE} = -4\text{V}$	15	-	75	-
Current Gain Bandwidth Product	f_T	$V_{CE} = -10\text{V}$, $I_C = -500\text{mA}$, $f = 1\text{MHz}$	3	-	-	MHz

Note: Pulse Test: $P_W \leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

■ TYPICAL CHARACTERISTICS



Technical drawing of a mechanical part, showing front and side views with dimensions.

Front View Dimensions:

- Top edge: 1.0 ± 0.15
- Top edge: $0.05^{+0.015}_{-0.03}$
- Top edge: 5.33 ± 0.20
- Right edge: 1.78 ± 0.2
- Right edge: 6.1 ± 0.1
- Bottom edge: 0.840 ± 0.1
- Bottom edge: 2.286
- Bottom edge: $0.76^{+0.10}_{-0.02}$
- Left edge: 6.6
- Left edge: 0.8 ± 0.2
- Left edge: $1.2 \pm 0.1^{+0.10}_{-0.05}$
- Top-left corner: $R1.438$

Side View Dimensions:

- Top edge: 2.3 ± 0.15
- Top edge: 0.5
- Top edge: $1.062^{+0.35}_{-0.1}$
- Top edge: 7.0°
- Top edge: 10.2 ± 0.3
- Top edge: 3.1 ± 0.3
- Top edge: $0.5^{+0.1}_{-0}$
- Top edge: $0 \sim 0.15$
- Top edge: $0 \sim 5^\circ$
- Top edge: 1.65