

■ PRODUCT CHARACTERISTICS

BVCBO	100V
BVCEO	100V
IC	6A

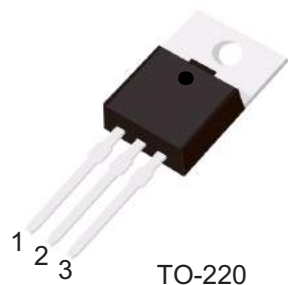
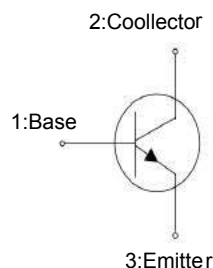
■ DESCRIPTION

- 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



■ 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	$T_C = 25^\circ\text{C}$	P_C	65	W
	$T_A = 25^\circ\text{C}$		2	W
Junction Temperature		T_J	150	$^\circ\text{C}$
Storage Temperature		T_{STG}	-65 ~ +150	$^\circ\text{C}$

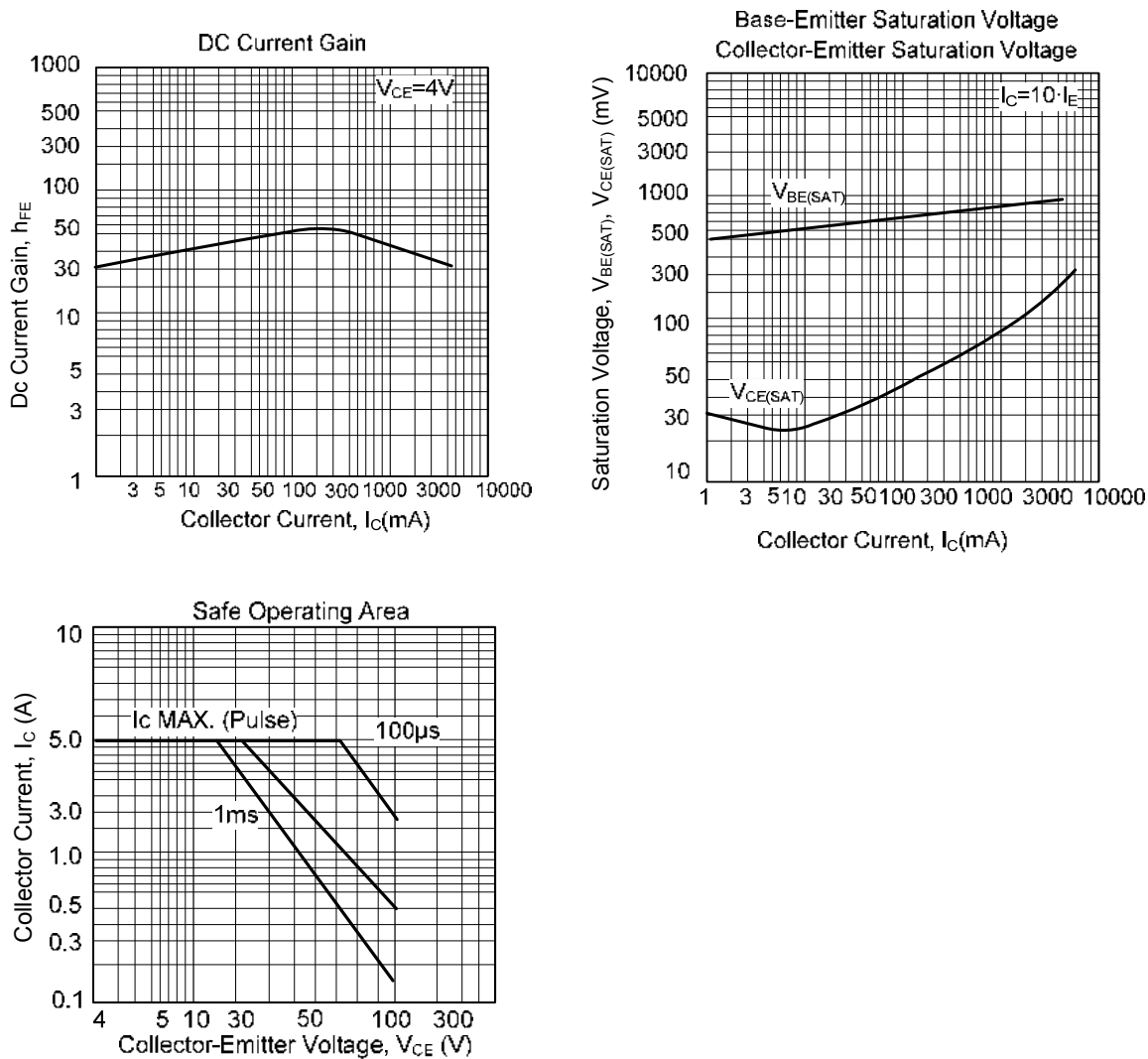
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ 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}	$I_C=30\text{mA}$, $I_B=0$	100			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)	$V_{BE(ON)}$	$I_C=6\text{A}$, $V_{CE}=4\text{V}$			2.0	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



■ TO-220-3L PACKAGE OUTLINE DIMENSIONS

