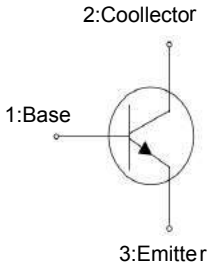
■ PRODUCT CHARACTERISTICS

BVCBO	100V
BVCEO	100V
IC	6A

Symbol



■ DESCRIPTION

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

■ APPLICATIONS

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

TO-220

■ ABSOLUTE MAXIMUM RATINGS (T_C = 25°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°C	P_C	65	W
	T_A=25°C		2	W
Junction Temperature		T_J	150	°C
Storage Temperature		T_{STG}	-65 ~ +150	°C

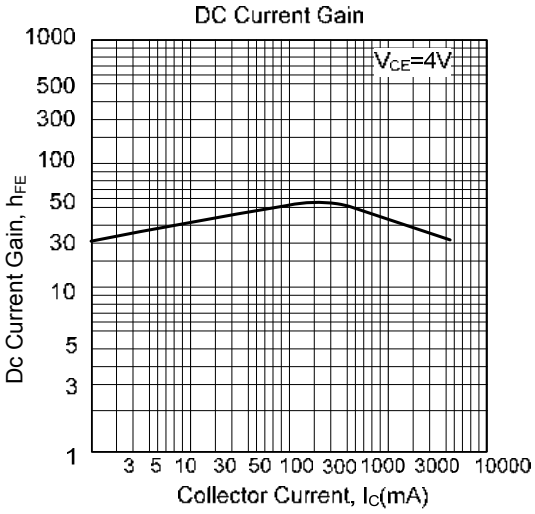
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

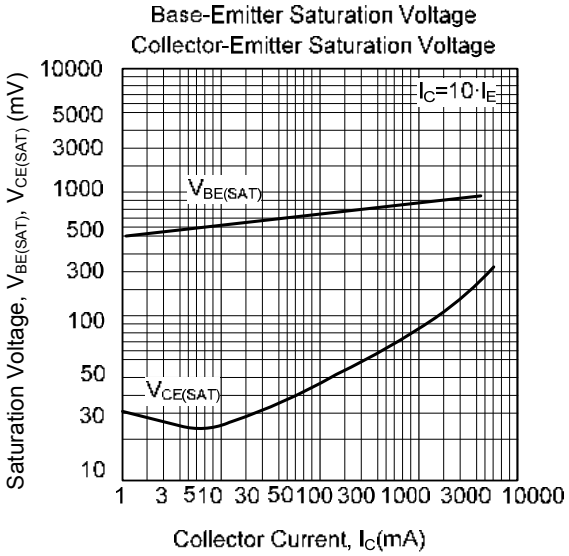
■ ELECTRICAL CHARACTERISTICS (T_C = 25°C, unless otherwise specified)

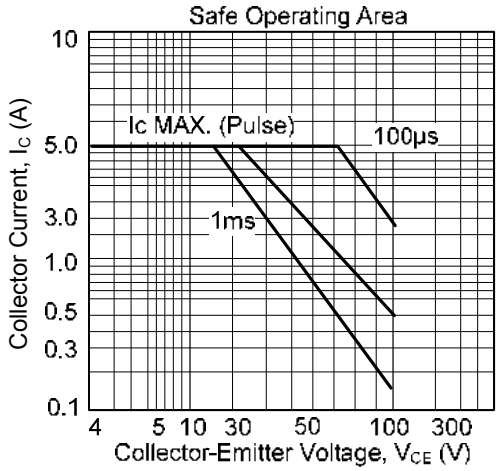
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Emitter Base Breakdown Voltage	BV_{EBO}	I_E=100μA, I_C=0	5			V
Collector Base Breakdown Voltage	BV_{CBO}	I_C=100μA, I_E=0	100			V
Collector Emitter Sustaining Voltage (Note)	BV_{CEO}	I_C=30mA, I_B=0	100			V
Collector Cutoff Current	I_{CEO}	V_{CE}=60V, I_B=0			0.7	mA
Collector Cutoff Current	I_{CES}	V_{CE}=100V, V_{EB}=0			400	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=5V, I_C=0			1	mA
Collector-Emitter Saturation Voltage (Note)	$V_{CE(SAT)}$	I_C=6A, I_B=600mA			1.5	V
Base-Emitter On Voltage (Note)	$V_{BE(ON)}$	I_C=6A, V_{CE}=4V			2.0	V
DC Current Gain (Note)	h_{FE1}	I_C=300mA, V_{CE}=4V	30			
	h_{FE2}	I_C=3A, V_{CE}=4V	15		75	
Current Gain Bandwidth Product	f_T	V_{CE}=10V, I_C=500mA, f=1MHz	3			MHz

Note: Pulse Test: $P_W \leqq 300\mu s$, Duty Cycle $\leqq 2\%$

■ TYPICAL CHARACTERISTICS







■ TO-220-3L PACKAGE OUTLINE DIMENSIONS