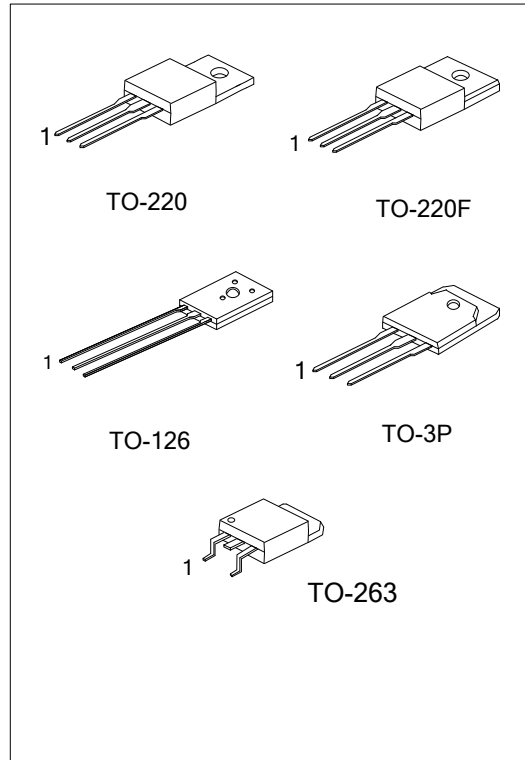




**SWITCHING REGULATOR APPLICATIONS**

■ **FEATURES**

- \* High Speed.
- \* High Breakdown Voltage ( $V_{CBO}=1500V$ ).
- \* High Reliability.



■ **ORDERING INFORMATION**

Ordering Number		Package	Pin Description			Packing
Lead Free	Halogen Free		1	2	3	
C6084L-x-TA3 -T	C6084G-TA3-x-T	TO-220	B	C	E	Tube
C6084L-x-TF3 -T	C6084G-TF3-x-T	TO-220F	B	C	E	Tube
C6084L-x-T60-K	C6084G-T60-x-K	TO-126	B	C	E	Bulk
C6084L-x-T3P-T	C6084G-T3P-x-T	TO-3P	B	C	E	Tube
C6084L-x-TQ2-R	C6084G-TQ2-x-R	TO-263	B	C	E	Tape Reel
C6084L-x-TQ2-T	C6084G-TQ2-x-T	TO-263	B	C	E	Tube

<p>C6084L-x-TA3-T</p>	<p>(1) T: Tube, K: Bulk, R: Tape Reel                  (2) TA3: TO-220, TF3: TO-220F, T60: TO-126, T3P: TO-3P, TQ2: TO-263                  (3) x: refer to Classification of <math>h_{FE1}</math>                  (4) G: Halogen Free, L: Lead Free</p>
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■ ABSOLUTE MAXIMUM RATING ( $T_A=25^\circ\text{C}$ )

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage	TO-220/TO-220F/TO-3P/ TO-263	$V_{CBO}$	1.5	KV
	TO-126		1.4	
Collector-Emitter Voltage		$V_{CEO}$	800	V
Emitter-Base Voltage		$V_{EBO}$	5	V
Collector Current	TO-220/TO-220F/TO-3P/ TO-263	$I_C$	5	A
	TO-126		3	
	TO-220/TO-220F/TO-3P/ TO-263	$I_{CP}$	12	A
	TO-126		6	
Collector Dissipation	TO-220/ TO-263	$P_C$	1.75	W
	TO-220F		1.35	
	TO-126		1.25	
	TO-3P		3.125	
Junction Temperature		$T_J$	150	$^\circ\text{C}$
Storage Temperature		$T_{STG}$	-55 ~ +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.

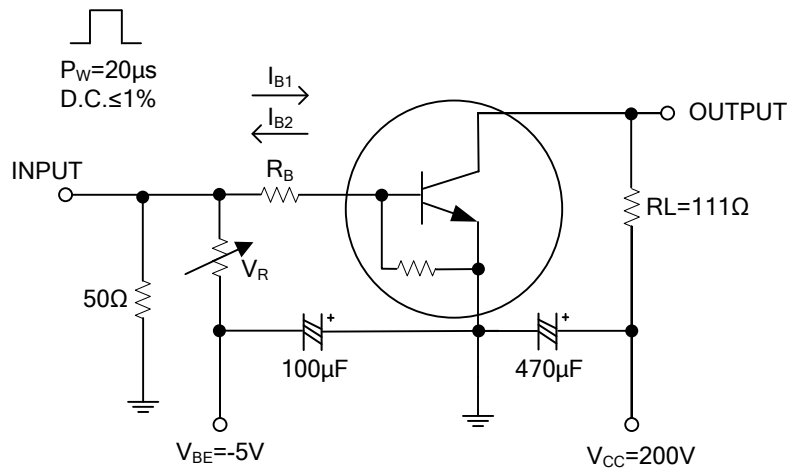
■ ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ )

PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cutoff Current		$I_{CBO}$	$V_{CB}=800\text{V}, I_E=0\text{A}$			10	$\mu\text{A}$
Collector Cutoff Current		$I_{CES}$	$V_{CE}=1500\text{V}, R_{BE}=0\Omega$			1.0	mA
Collector Sustain Voltage		$V_{CEO(SUS)}$	$I_C=10\text{mA}, I_B=0\text{A}$	800			V
Emitter Cutoff Current		$I_{EBO}$	$V_{BE}=4\text{V}, I_C=0\text{A}$			1.0	mA
Collector-Emitter Saturation Voltage	TO-220/TO-220F/ TO-263/TO-3P	$V_{CE(SAT)}$	$I_C=2.7\text{A}, I_B=0.54\text{A}$			3	V
	TO-126		$I_C=1.4\text{A}, I_B=0.27\text{A}$			3	
Base-Emitter Saturation Voltage	TO-220/ TO-220F/ TO-263/TO-3P	$V_{BE(SAT)}$	$I_C=2.7\text{A}, I_B=0.54\text{A}$			1.5	V
	TO-126		$I_C=1.4\text{A}, I_B=0.27\text{A}$			1.5	
DC Current Gain		$h_{FE1}$	$V_{CE}=5\text{V}, I_C=0.5\text{A}$	10		25	
	TO-220/TO-220F/ TO-263/TO-3P	$h_{FE2}$	$V_{CE}=5\text{V}, I_C=3\text{A}$	5		8	
	TO-126		$V_{CE}=5\text{V}, I_C=1.8\text{A}$	5		8	
Fall Time		$T_F$	$I_C=1.8\text{A}, I_{B1}=0.36\text{A}, I_{B2}=-0.72\text{A}$			0.2	$\mu\text{S}$

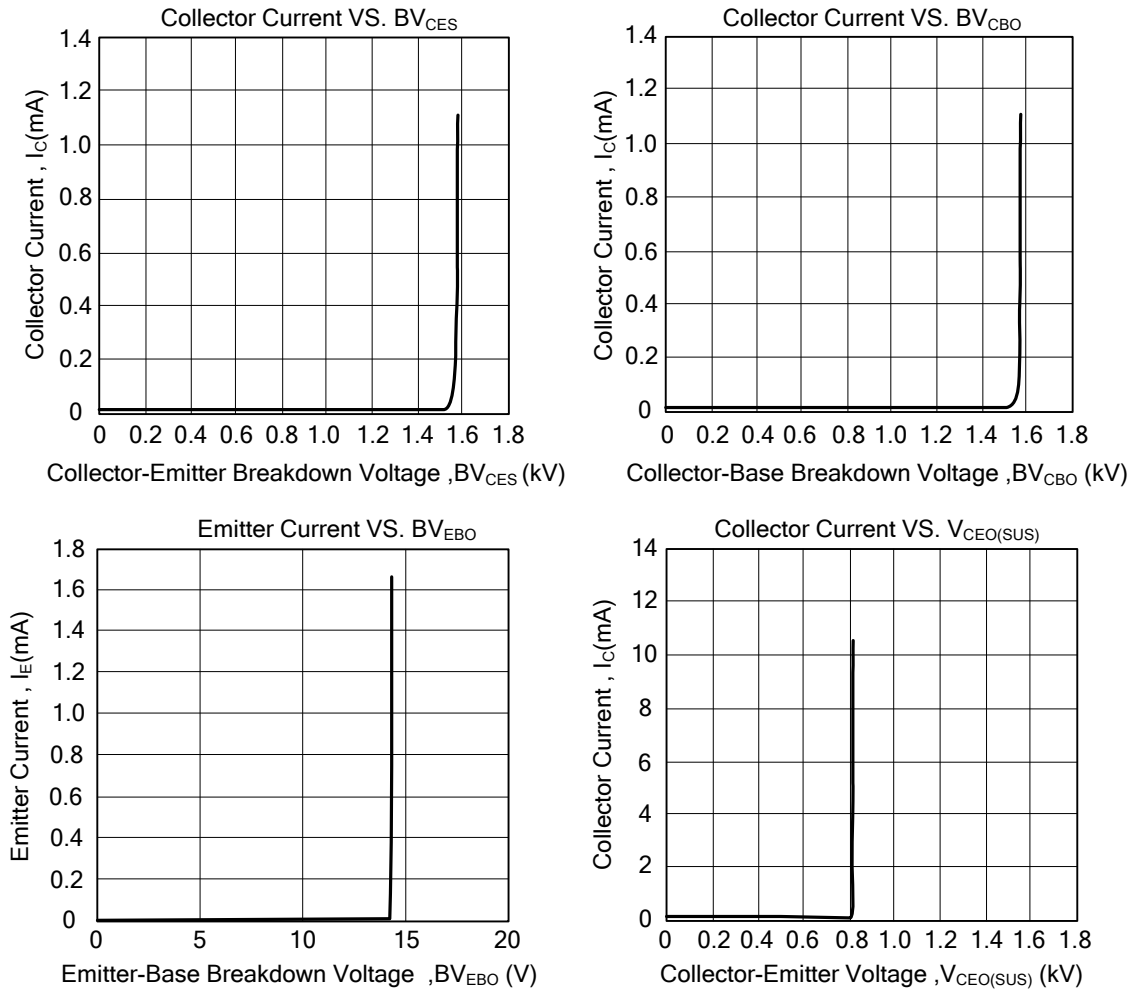
■ CLASSIFICATION OF  $h_{FE1}$

RANK	A	B	C
RANGE	10 ~ 15	15 ~ 20	20 ~ 25

### ■ TEST CIRCUIT



### ■ TYPICAL CHARACTERISTICS



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