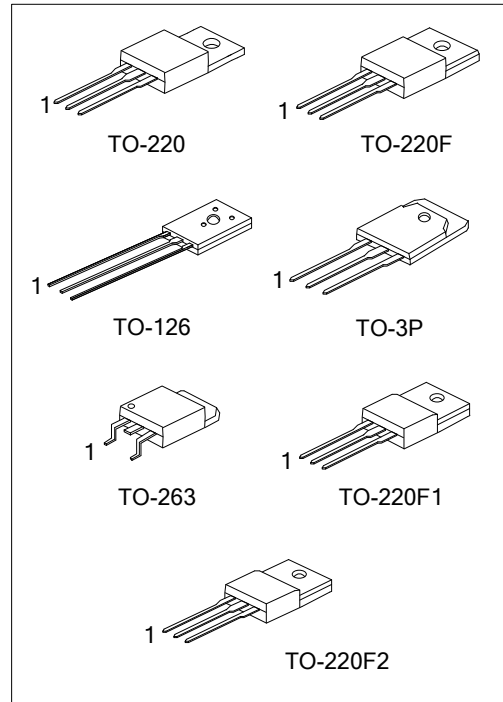




**SWITCHING REGULATOR APPLICATIONS**

■ **FEATURES**

- \* High Speed.
- \* High Breakdown Voltage ( $V_{CBO}=1400V$ ).
- \* High Reliability.



■ **ORDERING INFORMATION**

Ordering Number		Package	Pin Description			Packing
Lead Free	Halogen Free		1	2	3	
C6084L-x-TA3 -T	C6084G-x-TA3-T	TO-220	B	C	E	Tube
C6084L-x-TF3 -T	C6084G-x-TF3-T	TO-220F	B	C	E	Tube
C6084L-x-TF1 -T	C6084G-x-TF1-T	TO-220F1	B	C	E	Tube
C6084L-x-TF2-T	C6084G-x-TF2-T	TO-220F2	B	C	E	Tube
C6084L-x-TQ2-T	C6084G-x-TQ2-T	TO-263	B	C	E	Tube
C6084L-x-TQ2-R	C6084G-x-TQ2-R	TO-263	B	C	E	Tape Reel
C6084L-x-T3P-T	C6084G-x-T3P-T	TO-3P	B	C	E	Tube
C6084L-x-T60-K	C6084G-x-T60-K	TO-126	B	C	E	Bulk

Note: Pin assignment: E: Emitter B: Base C: Collector

<p>C6084L-x-TA3-T</p> <p>(1) Packing Type (2) Package Type (3) Rank (4) Green Package</p>	<p>(1) T: Tube, R: Tape Reel, K: Bulk (2) TA3: TO-220, TF3: TO-220F, TF2: TO-220F2 TQ2: TO-263, T3P: TO-3P, T60: TO-126 (3) x: refer to Classification of <math>h_{FE1}</math> (4) L: Lead Free, G: Halogen Free and Lead Free</p>
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■ **MARKING**

TO-220 / TO-220F / TO-220F1 TO-220F2 / TO-263 / TO-3P	TO-126

■ ABSOLUTE MAXIMUM RATING (T<sub>A</sub>=25°C)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage		V <sub>CBO</sub>	1.4	KV
Collector-Emitter Voltage		V <sub>CEO</sub>	800	V
Emitter-Base Voltage		V <sub>EBO</sub>	5	V
Collector Current	TO-3P/TO-263 TO-220/TO-220F TO-220F1/TO-220F2	I <sub>C</sub>	5	A
	TO-126		3	
	TO-3P/TO-263 TO-220/TO-220F TO-220F1/TO-220F2	I <sub>CP</sub>	12	A
	TO-126		6	
Collector Dissipation	TO-126	P <sub>C</sub>	1.25	W
	TO-3P		3.125	
	TO-220/ TO-263		1.75	
	TO-220F		1.35	
	TO-220F1/TO-220F2		1.45	
Junction Temperature		T <sub>J</sub>	150	°C
Storage Temperature		T <sub>STG</sub>	-55 ~ +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.

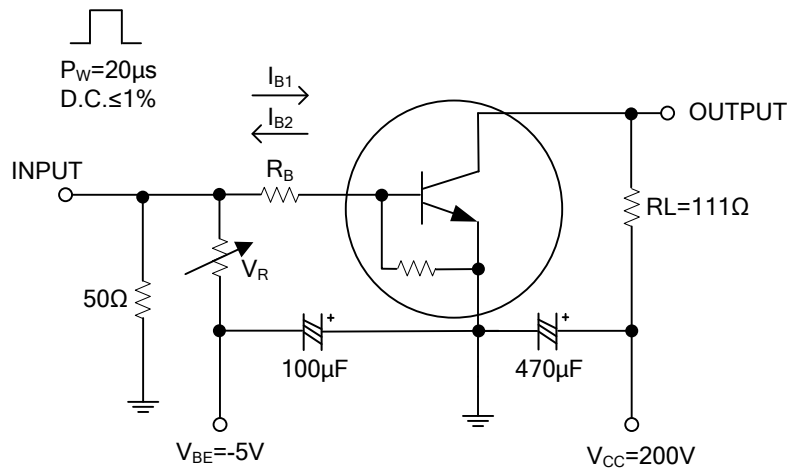
■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cutoff Current		I <sub>CBO</sub>	V <sub>CB</sub> =800V, I <sub>E</sub> =0A			10	μA
Collector Cutoff Current		I <sub>CES</sub>	V <sub>CE</sub> =1400V, R <sub>BE</sub> =0Ω			1.0	mA
Collector Sustain Voltage		V <sub>CEO(SUS)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0A	800			V
Emitter Cutoff Current		I <sub>EBO</sub>	V <sub>BE</sub> =4V, I <sub>C</sub> =0A			1.0	mA
Collector-Emitter Saturation Voltage	TO-220/TO-220F/TO-220F1 TO-220F2/TO-263/TO-3P	V <sub>CE(SAT)</sub>	I <sub>C</sub> =2.7A, I <sub>B</sub> =0.54A			3	V
	TO-126			I <sub>C</sub> =1.4A, I <sub>B</sub> =0.27A			
Base-Emitter Saturation Voltage	TO-220/TO-220F/TO-220F1 TO-220F2/TO-263/TO-3P	V <sub>BE(SAT)</sub>	I <sub>C</sub> =2.7A, I <sub>B</sub> =0.54A			1.5	V
	TO-126			I <sub>C</sub> =1.4A, I <sub>B</sub> =0.27A			
DC Current Gain		h <sub>FE1</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =0.5A	10		25	
	TO-220/TO-220F/TO-220F1 TO-220F2/TO-263/TO-3P	h <sub>FE2</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =3A	5		8	
	TO-126			V <sub>CE</sub> =5V, I <sub>C</sub> =1.8A	5		
Fall Time		T <sub>F</sub>	I <sub>C</sub> =1.8A, I <sub>B1</sub> =0.36A, I <sub>B2</sub> =-0.72A			0.2	μS

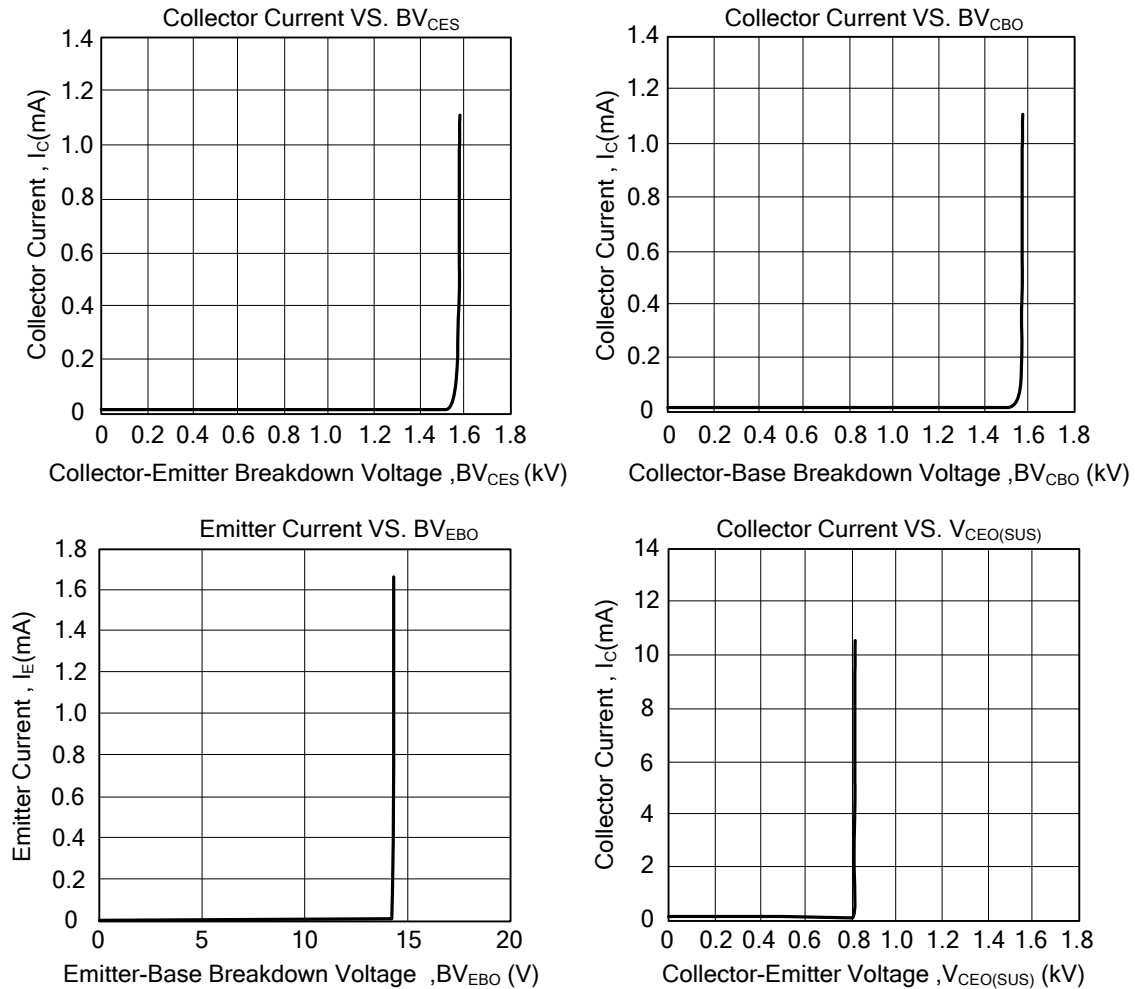
■ CLASSIFICATION OF h<sub>FE1</sub>

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

## ■ TEST CIRCUIT



### ■ TYPICAL CHARACTERISTICS



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