

## APPLICATIONS

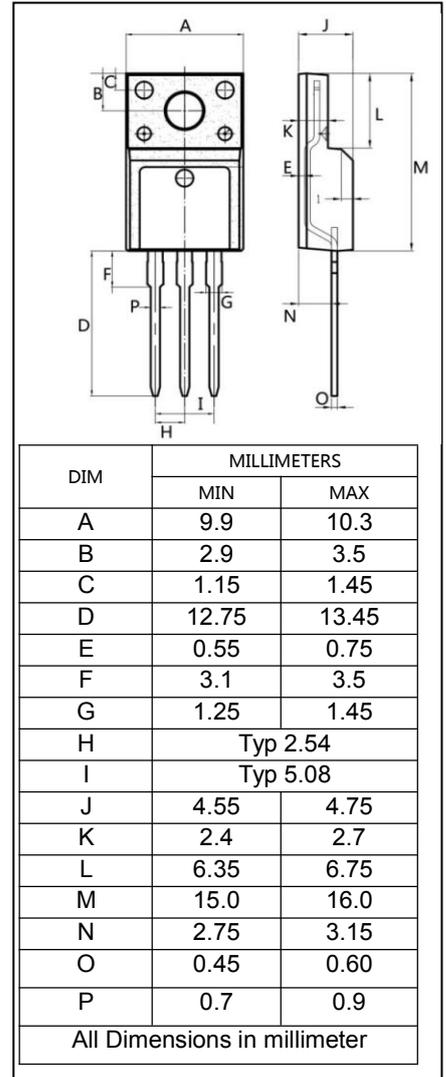
- Energy-saving light
- Electronic ballasts
- High frequency switching power supply
- High frequency power transform
- Commonly power amplifier

## FEATURES

- High breakdown voltage
- High current capability
- High switching speed
- High reliability
- RoHS product

## ABSOLUTE RATINGS (Tc=25°C)

Pulse Test: Pulse Width = 5.0 ms, Duty Cycle < 10%.



Parameter	Symbol	Value	Unit
Collector- Emitter Voltage	V <sub>CBO</sub>	700	V
Collector- Emitter Voltage	V <sub>CEO</sub>	400	V
Emitter-Base Voltage	V <sub>EBO</sub>	9	V
Collector Current (DC)	I <sub>C</sub>	8	A
Base Current (DC)	I <sub>B</sub>	8	A
Total Dissipation	P <sub>tot</sub>	100	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55~+150	°C

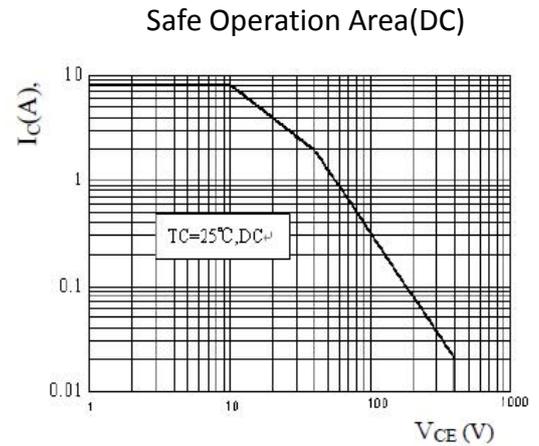
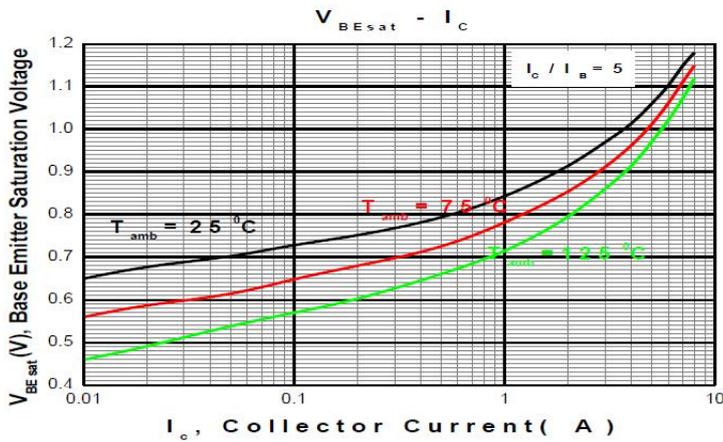
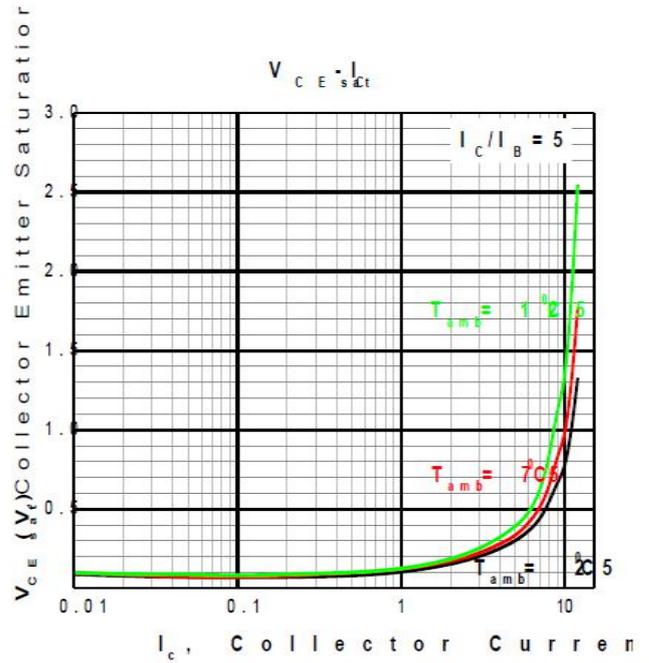
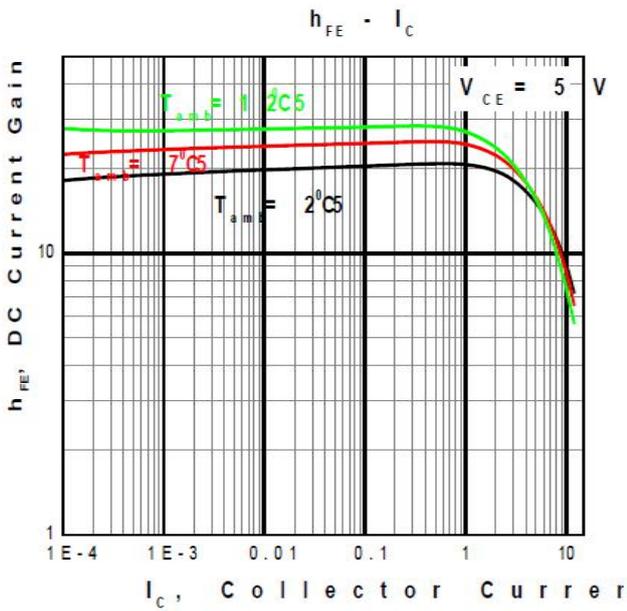
## ELECTRICAL CHARACTERISTIC

Parameter	Tests conditions	Value(min)	Value(max)	Unit
V <sub>(BR)CEO</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0	400	--	V
V <sub>(BR)CBO</sub>	I <sub>C</sub> =1mA, I <sub>B</sub> =0	700	--	V
V <sub>(BR)EBO</sub>	I <sub>E</sub> =1mA, I <sub>C</sub> =0	9	--	V
I <sub>CBO</sub>	V <sub>CB</sub> =700V, I <sub>E</sub> =0	--	100	μ A
I <sub>CEO</sub>	V <sub>CE</sub> =400V, I <sub>B</sub> =0	--	100	μ A
I <sub>EBO</sub>	V <sub>EB</sub> =9V, I <sub>C</sub> =0	--	100	μ A
H <sub>fe</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =2A	20	35	
V <sub>CE(sat)</sub>	I <sub>C</sub> =2A, I <sub>B</sub> =0.4A	--	1	V
t <sub>s</sub>	I <sub>C</sub> =500mA	2	10	μ S
f <sub>T</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =1A	4	--	MHz

## Thermal Resistance

Symbol	Parameter	MAX.	Units	Test Conditions
R <sub>θJC</sub>	Junction-to-Case	1.67	°C/W	Water cooled heatsink, P <sub>D</sub> adjusted for a peak junction temperature of +150°C.

## Characteristics Curve



### Power Dissipation vs Case Temperature

