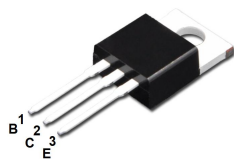
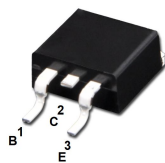


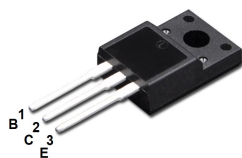
NPN Silicon Epitaxial Planar Transistor



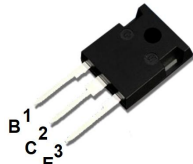
TO-220AB



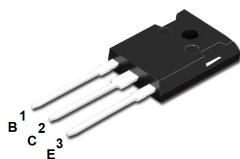
TO-263



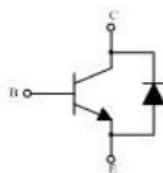
TO-220F



TO-247S



TO-247



FEATURES

- High voltage
- High speed switching

APPLICATIONS

- ELECTRONIC TRANSFORMER
- SWITCH MODE POWER SUPPLY



MECHANICAL DATA

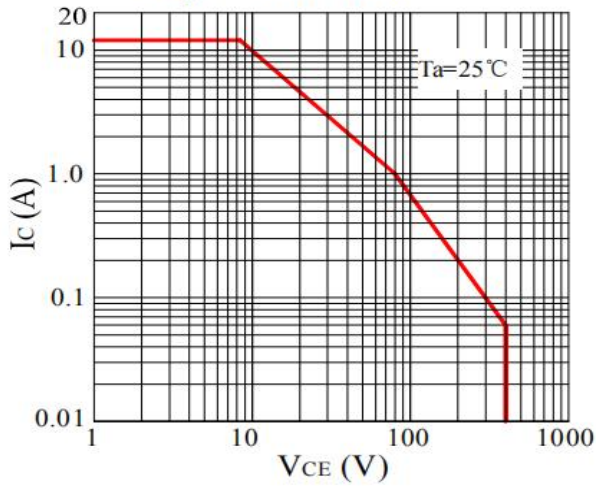
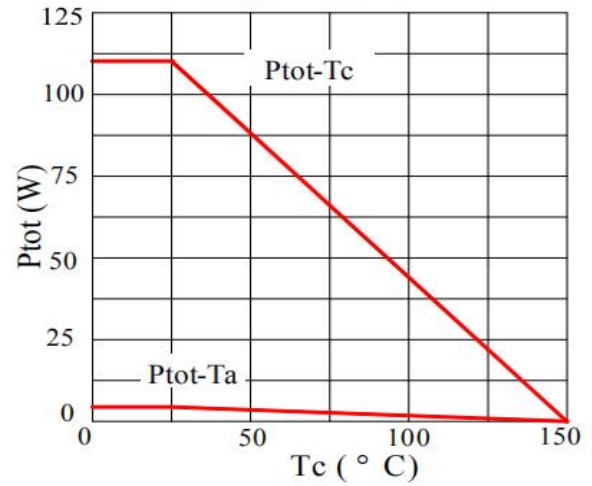
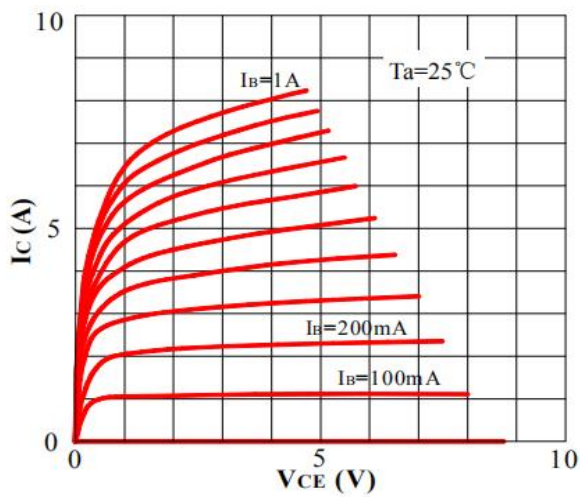
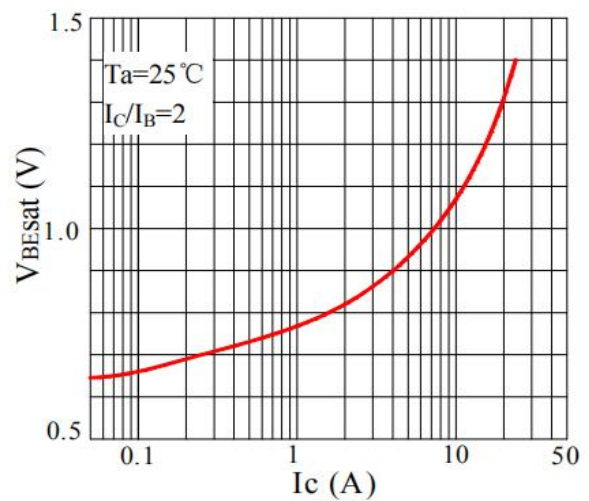
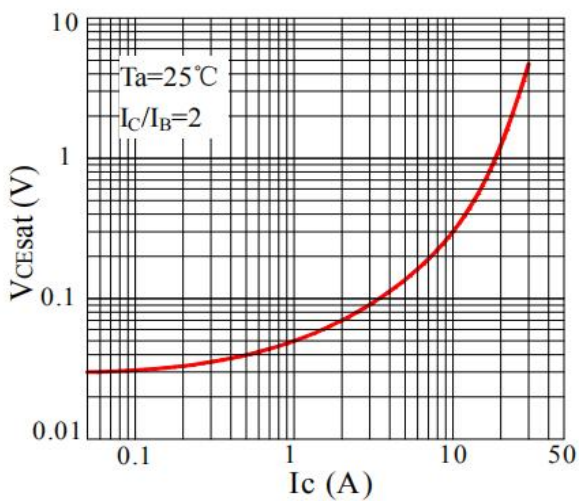
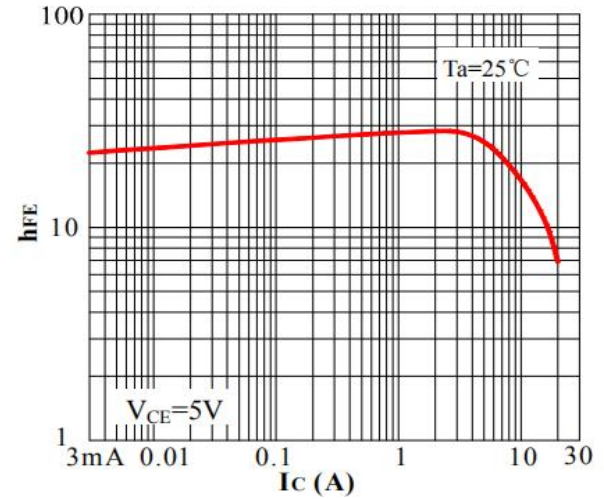
- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum, 10s per JESD 22-B106

Maximum Ratings at Ta=25°C unless otherwise specified

Characteristics	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	700	V
Collector Emitter Voltage	V_{CEO}	400	V
Emitter Base Voltage	V_{EBO}	9	V
Collector Current	I_C	12	A
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	1.56	°C/W
Power Dissipation (Tc = 25 °C) Superimposed on Rated Load (JEDEC method)	P_{tot}	3	W
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

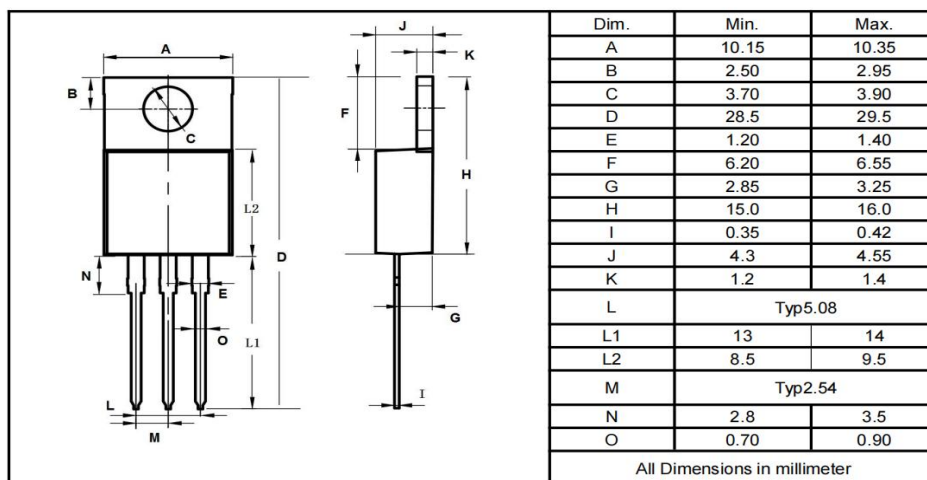
Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 5V$, $I_C = 3A$	h_{FE}	8	-	40	-
Collector Base Cutoff Current at $V_{CB} = 700V$	I_{CBO}	-	-	100	μA
Collector Emitter Cutoff Current at $V_{CE} = 400V$	I_{CEO}	-	-	100	μA
Emitter Base Cutoff Current at $V_{EB} = 9V$	I_{EBO}	-	-	100	μA
Collector Emitter Saturation Voltage at $I_C = 5A$, $I_B = 1A$	$V_{CE(sat)}$	-	-	1	V
Base Emitter Saturation Voltage at $I_C = 4A$, $V_{CE} = 1V$	$V_{BE(sat)}$	-	-	1.6	V
Transition Frequency at $V_{CE}=10V$, $I_C=500mA$, $f=1MHz$	f_T	4	-	-	MHZ

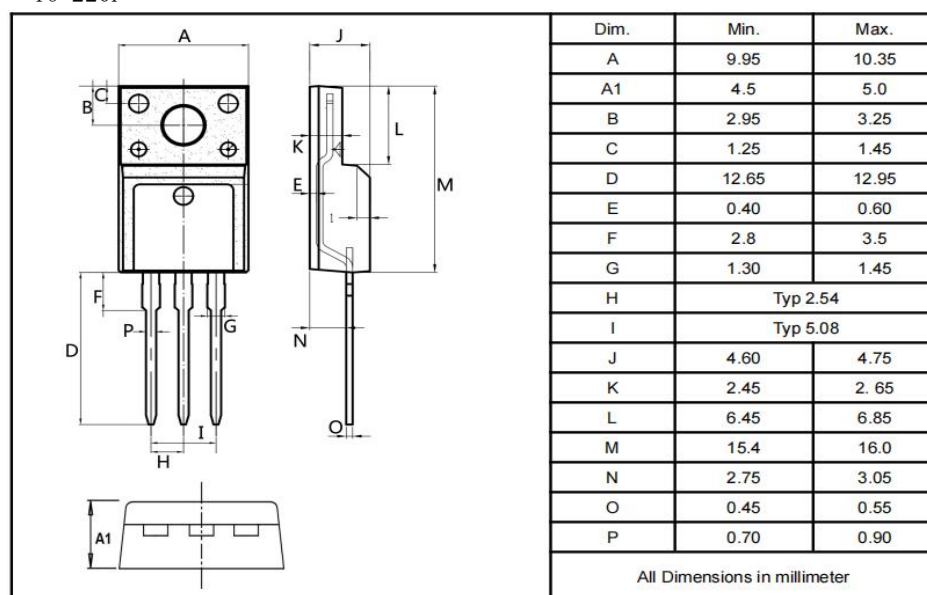
RATINGS AND CHARACTERISTIC CURVES
Fig1 SOA (DC)

Fig2 $P_{tot} - T$

Fig3 Static Characteristic

Fig4 $h_{FE} - I_C$


Package Outline Dimensions millimeters

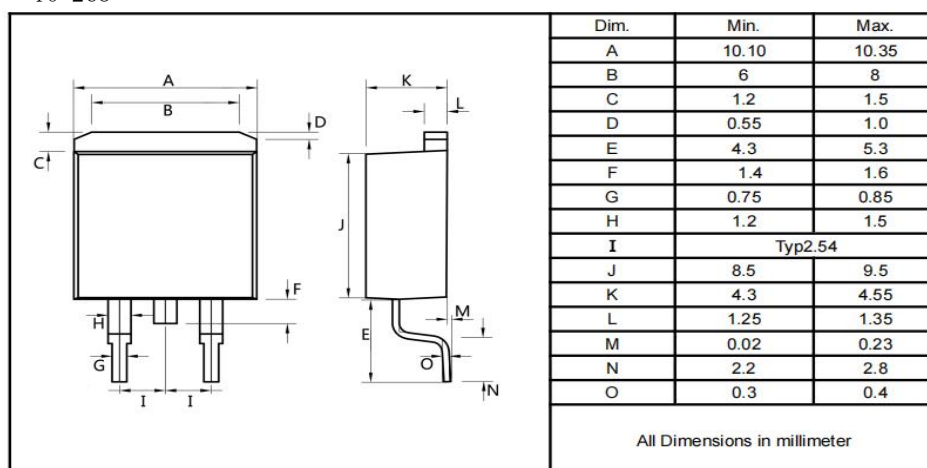
TO-220AB



TO-220F

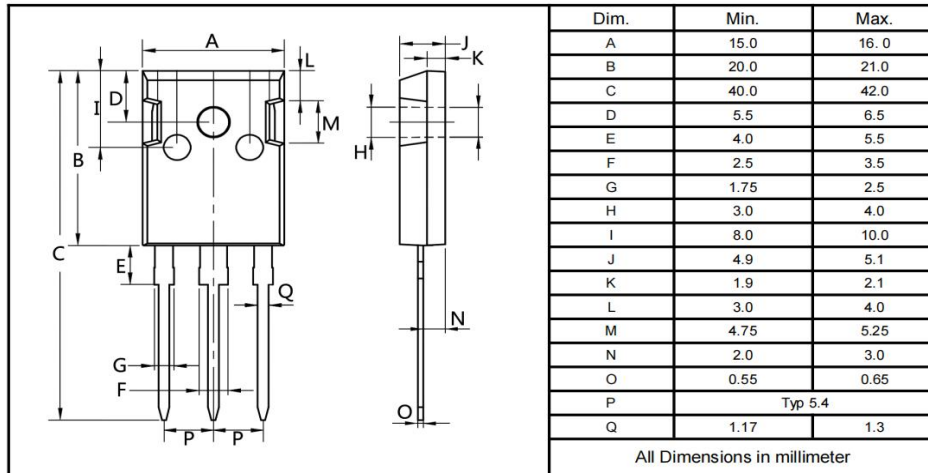


TO-263

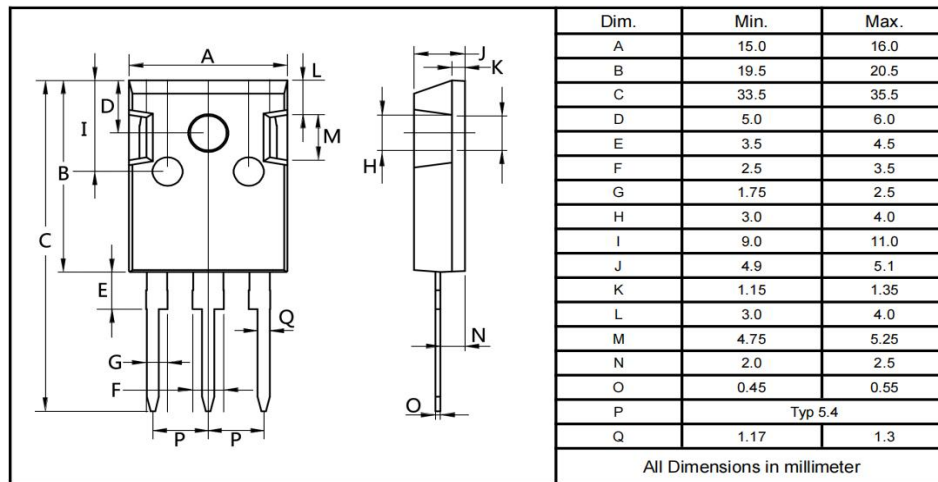


Package Outline Dimensions millimeters

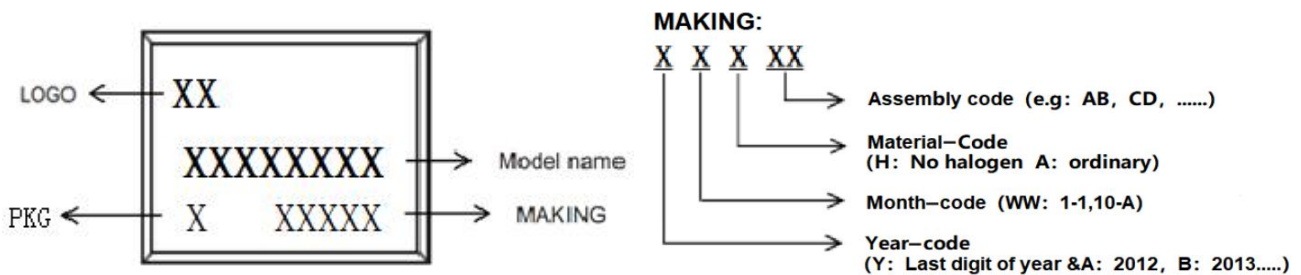
T0-247



T0-247S



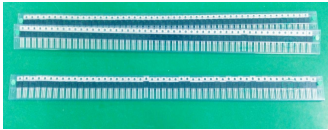
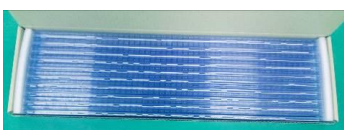
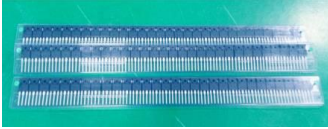
Marking on the body



Product specification classification

Part Number	Package	Unit Weight	Base Quantity	Delivery mode
LX13009A1	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton
LX13009A2	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton
LX13009A3	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton
LX13009A3-R	TO-263	0.04oz(1.16g)	800 pcs / tube	1600pcs/box 8000pcs/carton
LX13009A6	TO-247	0.209oz(5.93g)	30 pcs / tube	600pcs/box 3000pcs/carton
LX13009A7	TO-247S	0.158oz(4.48g)	30 pcs / tube	600pcs/box 3000pcs/carton

packing instruction

PKG	最小包装	内盒	外箱
TO-220AB TO-220F TO-263			
	50pcs/管	1000pcs/盒	5000pcs/箱
TO-263-R			
	800pcs/盘	1600pcs/盒	8000pcs/箱
TO-247 TO-247S			
	30pcs/管	600pcs/盒	3000pcs/箱

Notice

1. All product, product specifications and data are subject to change without notice to improve. The right to explain is owned by LINGXUN electronics company.

2. Confirm that operation temperature is within the specified range described in the product specification. Avoid applying power exceeding normal rated power;

exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.

3. LINGXUN electronics shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.