

NPN Silicon Epitaxial Planar Transistor

1.Base,2.Collector,3.Emitter

FEATURES

- High voltage
- High speed switching



APPLICATIONS

- ELECTRONIC TRANSFORMER
- SWITCH MODE POWER SUPPLY

MECHANICAL DATA

Case: Molded plasticPolarity: As markedMounting Position: Any

• Molded Plastic: UL Flammability Classification Rating 94V-0

• Lead free in compliance with EU RoHS 2011/65/EU directive

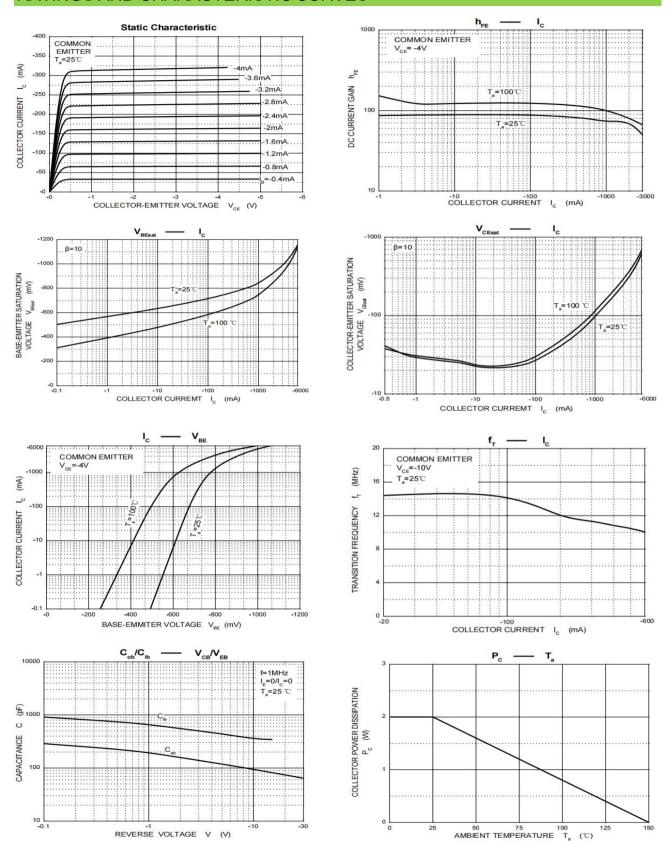
• Solder bath temperature 275 $^{\circ}$ C maximum,10s per JESD 22-B106

Maximum Ratings at Ta=25°C unless otherwise specified					
Characteristics	Symbol	Value	Unit		
Collector Base Voltage	V _{CBO}	-100	V		
Collector Emitter Voltage	V_{CEO}	-100	V		
Emitter Base Voltage	V_{EBO}	-5	V		
Collector Current	I _C	-6	Α		
Power Dissipation (Tc = 25 OC) Superimposed on Rated Load (JEDEC method)	P _{tot}	2	W		
Operating Temperature Range	Τ _J	150	°C		
Storage Temperature Range	T _{STG}	-55 to +150	°C		

Electrical Characteristics(Ta=25°C)					
Parameter	Symbol	Min.	Тур.	Max.	Unit
DC Current Gain at $V_{CE} = -4 \text{ V}$, $I_C = -3 \text{ A}$	h _{FE}	15	-	75	-
Collector Base Cutoff Current at V _{CB} = -100 V	I _{CBO}	-	-	-0.4	mA
Collector Emitter Cutoff Current at V _{CE} = -60 V	I _{CEO}	-	-	-0.7	mA
Emitter Base Cutoff Current at V _{EB} = -5 V	I _{EBO}	-	-	-1	mA
Collector Emitter Saturation Voltage at I _C = -6 A, I _B = -0.6 A	$V_{CE(sat)}$	-	-	-1.5	V
Base Emitter Saturation Voltage at $I_C = -6 \text{ A}, V_{CE} = -4 \text{ V}$	$V_{BE(on)}$	-	-	-2	V
Transition Frequency at V_{CE} = -10 V, I_C = -0.5 A	f _T	3	-	-	MHZ



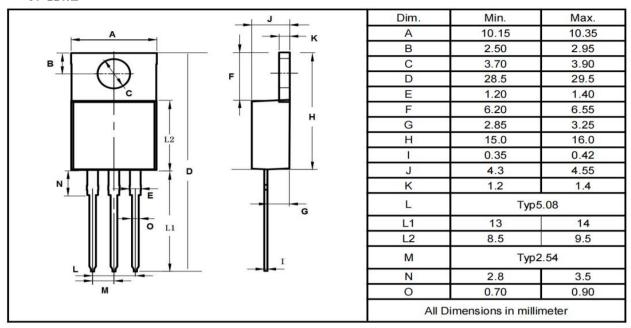
RATINGS AND CHARACTERISTIC CURVES



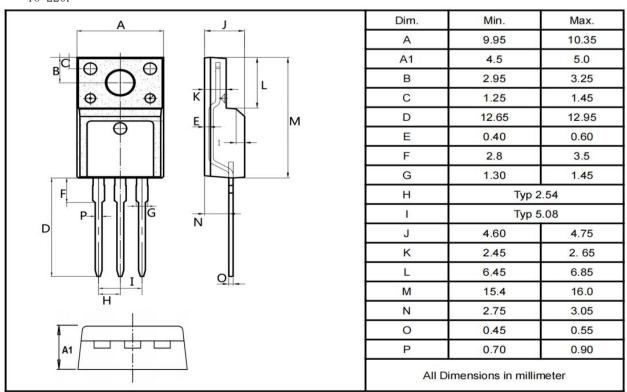


Package Outline Dimensions millimeters

TO-220AB



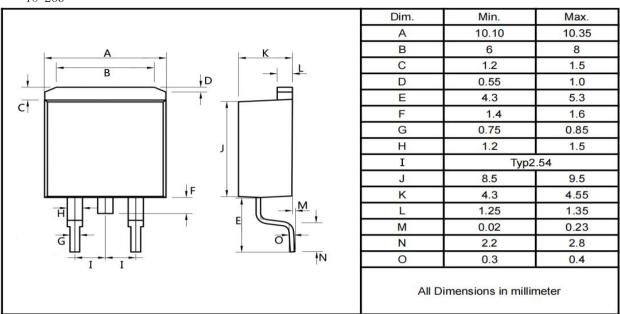
TO-220F



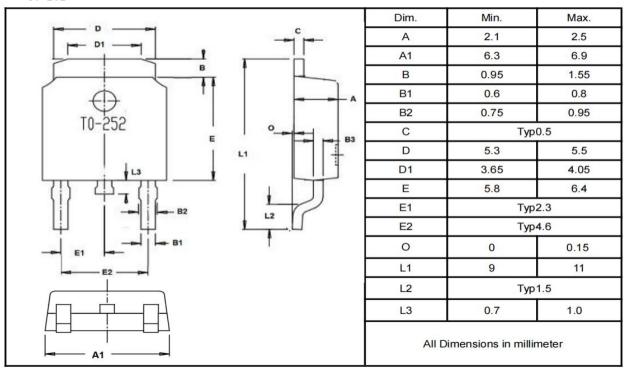


Package Outline Dimensions millimeters

T0-263

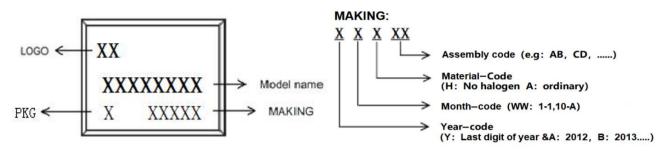


T0-252





Marking on the body



Ordering information					
Part Number	Package	Unit Weight	Base Quantity	Delivery mode	
TIP42C	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
TIP42C	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
TIP42C	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
TIP42C	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box 8000pcs/carton	
TIP42C	TO-252	0.011oz(0.32g)	2500 pcs / reel	5000pcs/box 25000pcs/carton	

Note: For Halogen Free molding compound, add "H" suffix to part number above.

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-252					
	2500pcs/盘	5000pcs/盒	25000pcs/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.