

ULTRAFAST RECOVERY RECTIFIERS





TO-220AB/CT





TO-263/DC



TO-252/CS



TO-251/D

MECHANICAL DATA

• Case: Molded plastic • Polarity: As marked • Mounting Position: Any

FEATURES

High reliability

• High current capability • High forward surge capability • Low power losses, High efficiency

APPLICATIONS

• High speed switching capability

• For use in low voltage, high frequency inverters

• 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

Fast recovery diode, mainly used for rectification, used in high-power equipment, The express and ultrafast recovery diodes are suitable for

high frequency and ultra high frequency circuits, respectively

Primary Characteristic			
Ι _ο	2*6A		
V_{RRM}	200V		
I _{FSM}	100A		
V_{F}	0.8V		
T _J max	150℃		
Assembly code	BA		

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified				
Characteristics		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Volta	age	V_{RRM}	200	V
Working Peak Reverse Voltage		V_{RWM}	200	V
Maximum DC Blocking Voltage		V_{DC}	200	V
Maximum Average Forward Rectified Per Leg			6	Α
Current	Total	I _O	12	A
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I _{FSM}	100	А
Operating Temperature Range		TJ	150	°C
Storage Temperature Range		T _{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1)				
TO-220AB,TO-263		R _{0 JC}	2	°C/W
TO-220F		v	4	

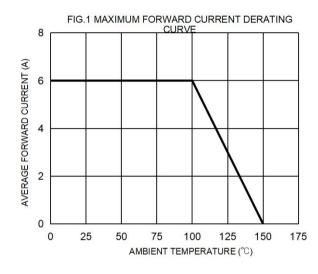
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

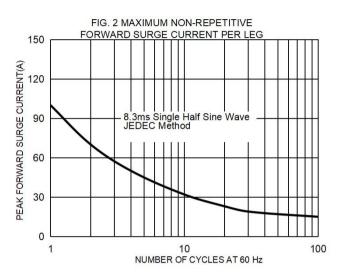
Electrical Characteristics (Per Leg) unless otherwise specified						
Characteristics		Symbol	Value		Unit	
Forward Voltage Drop(Note2)			Тур.	Max.		
at I₅=2A	TA=25°C	V _F	0.81	1		
at I _F -2A	TA=125°C		0.67	1		
at I _F =3A	TA=25°C		0.84	ı	V	
at IF-3A	TA=125°C			0.71	ı	
at I _F =6A	TA=25°C		0.92	0.97		
	TA=125°C		0.80	1		
Maximum Reverse Current at V _R =100V	TA=25°C	I _R	0.02	1	μΑ	
	TA=125°C		5	ı	μΑ	
Maximum Reverse Recovery Time at I _F =0.5A, I _R =1A,		Trr	-	35	ns	

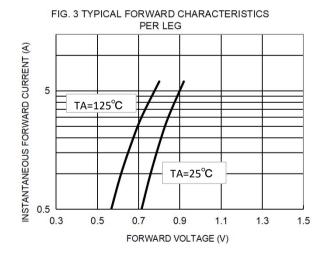
Note2:Pulse test: 300 µs pulse width, 1 % duty cycle

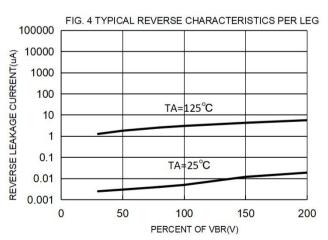


RATINGS AND CHARACTERISTIC CURVES



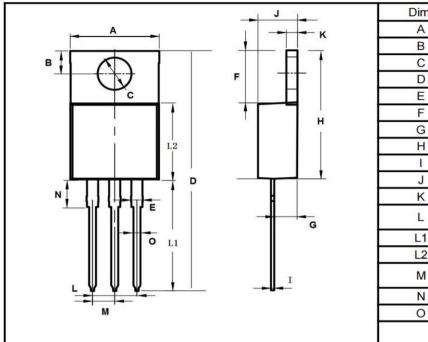






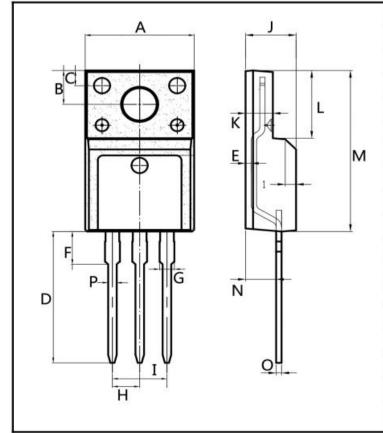
Package Outline Dimensions millimeters

TO-220AB



Dim.	Min. Max.		
Α	10.15	10.35	
В	2.50	2.95	
С	3.70	3.90	
D	28.5	29.5	
E	1.20	1.40	
F	6.20	6.55	
G	2.85	3.25	
Н	15.0	16.0	
1	0.35	0.42	
J	4.3	4.55	
K	1.2	1.4	
L	Typ5.08		
L1	13	14	
L2	8.5	9.5	
M	Typ2.54		
N	2.8 3.5		
0	0.70 0.90		
All Dimensions in millimeter			

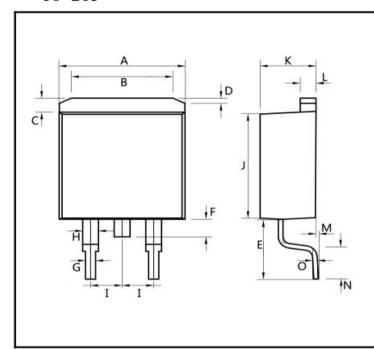
TO-220F



Dim.	Min.	Max.	
Α	9.95	10.25	
В	2.95	3.25	
С	1.25	1.45	
D	12.80	13.20	
E	0.40	0.60	
F	2.8	3.5	
G	1.30	1.45	
Н	Typ 2.54		
1	Typ 5.08		
J	4.5	5.0	
K	2.45	2. 65	
L	6.5	6.8	
M	15.4	16.0	
N	2.75	3.05	
0	0.45	0.55	
Р	0.70	0.90	

Package Outline Dimensions millimeters

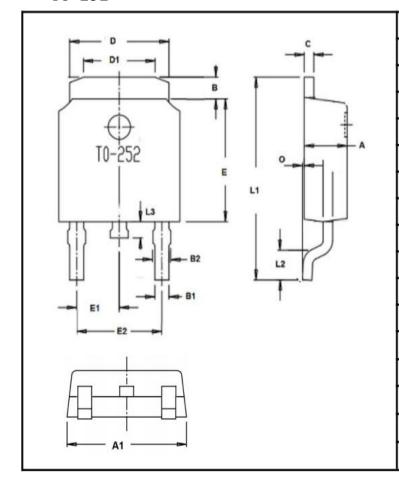
TO-263



Dim.	Min.	Max.
Α	10.10	10.35
В	6	8
С	1.2	1.5
D	0.55	1.0
E	4.3	5.3
F	1.4	1.6
G	0.75	0.85
Н	1.2	1.5
I	Typ2	2.54
J	8.5	9.5
K	4.3	4.55
L	1.25	1.35
M	0.02	0.23
N	2.2	2.8
0	0.3	0.4

All Dimensions in millimeter

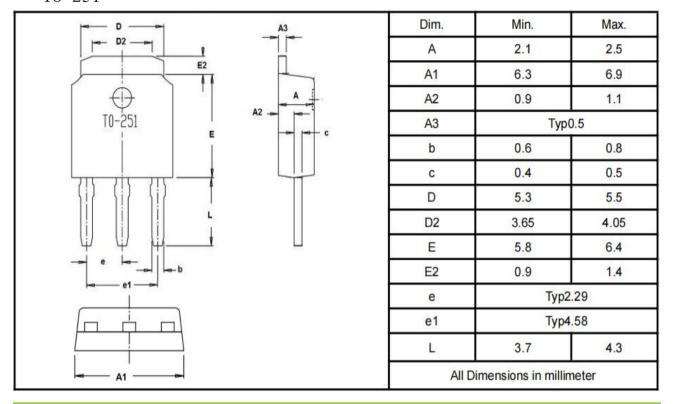
TO-252



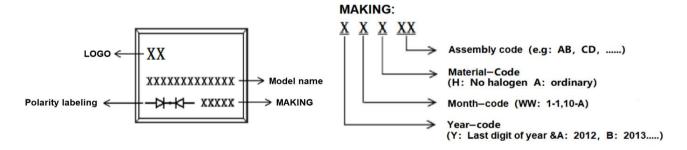
Dim.	Min.	Max.	
Α	2.1	2.5	
A1	6.3	6.9	
В	0.95	1.55	
B1	0.6	0.8	
B2	0.75	0.95	
С	Тур	0.5	
D	5.3	5.5	
D1	3.65	4.05	
E	5.8	6.4	
E1	Typ2.3		
E2	Typ4.6		
0	0	0.15	
L1	9	11	
L2	Typ1.5		
L3	0.7 1.0		
All Dimensions in millimeter			

Package Outline Dimensions millimeters

TO-251



Marking on the body



Ordering information					
Part Number	Package	Unit Weight	Base Quantity	Delivery mode	
MUR1220CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
MUR1220FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
MUR1220DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
MUR1220DC	TO-263-R	0.04oz(1.16g)	800 pcs / reel	1600pcs/box 8000pcs/carton	
MUR1220CS	TO-252	0.011oz(0.32g)	2500 pcs / reel	5000pcs/box 25000pcs/carton	
MUR1220D	TO-251	0.011oz(0.32g)	80 pcs / tube	4000pcs/box 24000pcs/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/盘	25000pcs/箱
TO-251			
	80pcs/管	4000pcs/盒	24000pvs/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.