

VERY LOW VF SCHOTTKY RECTIFIER





TO-220AB/CT TO-220F/FCT





TO-263/DC



TO-262/CR

FEATURES

- Very low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection



APPLICATIONS

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters, lighting and on-board DC/DC conerters

Primary Characteristic	
Ι _ο	2*10A
V_{RRM}	100V
I _{FSM}	280A
V_{F}	0.62V
T _J max	150℃

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°C maximum,10s per JESD 22-B106

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified				
Characteristics		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	V
Working Peak Reverse Voltage		V_{RWM}	100	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Rectified	Per Leg	1	10	۸
Current	Total	I _O	20	Α
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I _{FSM}	280	Α
Operating Temperature Range		TJ	-50 to +150	°C
Storage Temperature Range		T _{STG}	-50 to +150	°C
Typical Thermal Resistance (Note1)				
TO-220AB,TO-263,TO-252,TO-262		R _{0 JC}	2	°C/W
TO-220F		v	4	

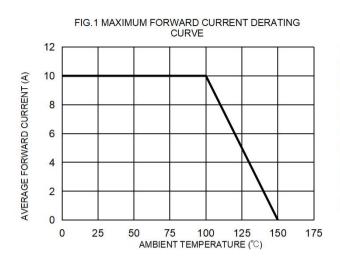
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

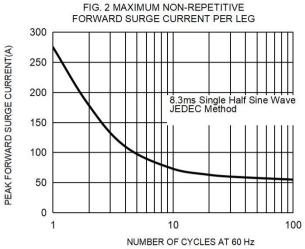
Electrical Characteristics (Per Leg) unless otherwise specified					
Characteristics		Symbol	Value		Unit
Forward Voltage Drop(Note2)			Тур.	Max.	
at I _F =3A	TA=25°C		0.49	-	
	TA=125°C	V _F	0.43	-	V
ot I = 5 A	TA=25°C		0.55	0.58	
at I _F =5A	TA=125°C		0.51	-	
at I _F =10A	TA=25°C		0.67	0.70	
	TA=125°C]	0.62	-	
Maximum Reverse Current at V _R =100V	TA=25°C	- I _R	5	50	μA
	TA=125°C		4	-	mA

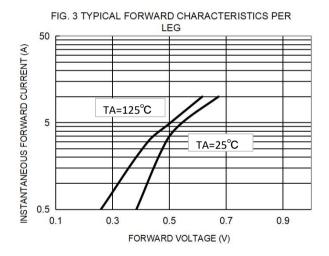
Note2:Pulse test: 300 µs pulse width, 1 % duty cycle

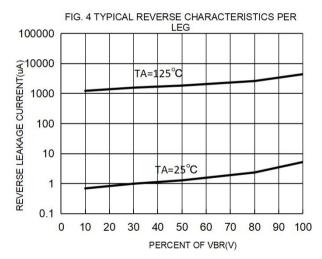


RATINGS AND CHARACTERISTIC CURVES



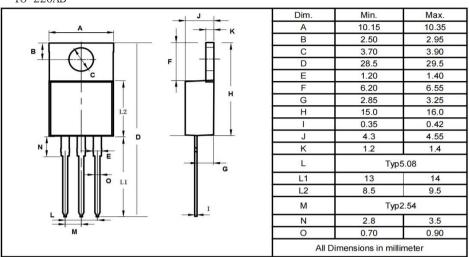




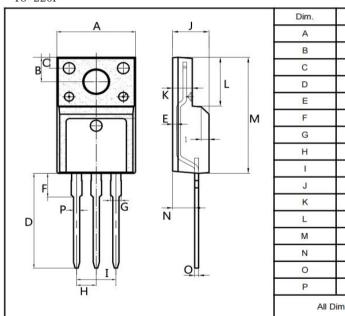


Package Outline Dimensions millimeters

TO-220AB



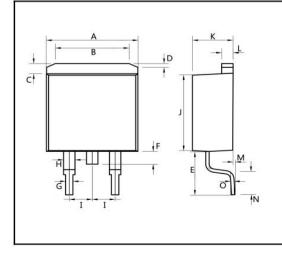
TO-220F



CATALOG STATE		184650000	
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		
Î	Typ 5.08		
J	4.5	5.0	
К	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	

Max.

TO-263

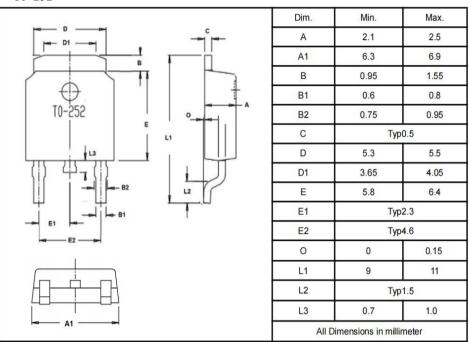


Dim.	Min.	Max.	
Α	10.10	10.35	
В	6	8	
С	1.2	1.5	
D	0.55	1.0	
E	4.3	5.3	
F	1.4	1.6	
G	0.75	0.85	
Н	1.2	1.5	
I	Typ2.54		
J	8.5	9.5	
K	4.3	4.55	
L	1.25	1.35	
M	0.02	0.23	
N	2.2	2.8	
0	0.3	0.4	

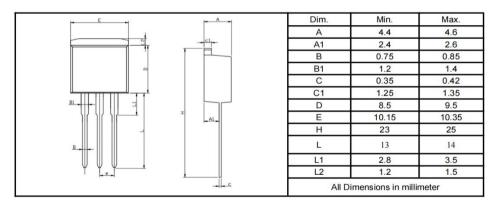
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Package Outline Dimensions millimeters

TO-252

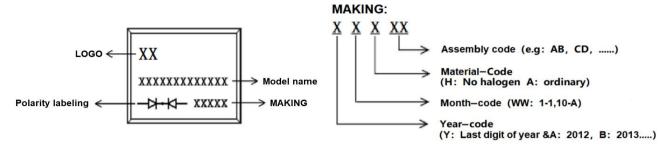


TO-262





Marking on the body



Ordering information					
Part Number	Package	Unit Weight	Base Quantity	Delivery mode	
SBT20V100CT	TO-220AB	0.07oz(1.96g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
SBT20V100FCT	TO-220F	0.06oz(1.74g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
SBT20V100DC	TO-263	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/carton	
SBT20V100DC-R	TO-263	0.04oz(1.16g)	800 pcs / reel	1600pcs/box 8000pcs/carton	
SBT20V100CS	TO-252	0.011oz(0.32g)	2500 pcs / reel	5000pcs/box 25000pcs/carton	
SBT20V100CR	TO-262	0.04oz(1.16g)	50 pcs / tube	1000pcs/box 5000pcs/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 TO-262			Mago Mago Mago Mago			
	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.