REASUNOS

MBR20300LCT MBRF20300LCT MBRS20300LCT

🗭 Lead Free Package and Finish

LOW VF SCHOTTKY RECTIFIER





TO-220AB/MBR

ITO -220/MBRF





TO-263/MBRS

Primary Characteristic			
Ι _ο	2*10A		
V _{RRM}	300V		
I _{FSM}	120A		
V _F	0.78V		
T _J max	175 ℃		

FEATURES

Low forward voltage

- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection
- Excellent high temperature stability

APPLICATIONS

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

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-

Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified					
Characteristics		Symbol	Value	Unit	
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	300	V	
Working Peak Reverse Voltage		V _{RWM}	300	V	
Maximum DC Blocking Voltage		V _{DC}	300	V	
Maximum Average Forward Rectified	ge Forward Rectified Per Leg		10	٨	
Current	Total	I _O	20	A	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave		I _{FSM}	120	А	
Operating Temperature Range		Tj	-50 to +175	С°	
Storage Temperature Range		T _{STG}	-50 to +175	С°	
Typical Thermal Resistance (Note1)					
TO-220AB,TO-263		R _{0 JC}	2	°C/W	
ITO-220			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.			
ot L = 5 A	TA=25°C		0.78	0.84			
at I _F =5A	TA=125°C		0.65	-			
at 1 - 10 A	TA=25°C	V _F	0.82	0.86	V		
at $I_F = 10A$	TA=125°C		0.70	-			
ot 1 = 15 A	TA=25°C		0.92	1.00			
at I _F = 15A	TA=125°C	1	0.78	-			
Maximum Bayaraa Current at 1/ =2001/	TA=25°C	I _R	0.2	1	μA		
Maximum Reverse Current at V _R =300V	TA=125°C		10	-	mA		

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

REASUNOS

RATINGS AND CHARACTERISTIC CURVES





MBR20300LCT

MBRF20300LCT MBRS20300LCT



REASUNOS

_				·			
	200	V D D C V	() utline		neinne	millime	tore
	au	haue '			11310113		

TO-220AB



All Dimensions in millimeter