

# MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

Product data sheet

**FEATURES**

- 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 converters

Primary Characteristic	
$I_o$	2*10A
$V_{RRM}$	200V
$I_{FSM}$	250A
$V_F$	0.76V
$T_{Jmax}$	150°C
Assembly code	AH

**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

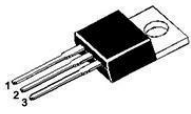
Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified				
Characteristics		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		$V_{RRM}$	200	V
Working Peak Reverse Voltage		$V_{RWM}$	200	V
Maximum DC Blocking Voltage		$V_{DC}$	200	V
Maximum Average Forward Rectified Current	Per Leg	$I_o$	10	A
	Total		20	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		$I_{FSM}$	250	A
Operating Temperature Range		$T_J$	150	°C
Storage Temperature Range		$T_{STG}$	-40 to +150	°C
Typical Thermal Resistance(Note1)		$R_{\theta JC}$	2	°C/W
TO-220AB, TO-263, TO-252				
TO-220F				

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

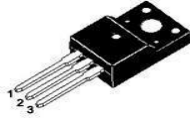
Electrical Characteristics (Per Leg) unless otherwise specified					
Characteristics		Symbol	Value	Unit	
Forward Voltage Drop(Note2)		$V_F$	Typ.	Max.	
at $I_F=3A$	TA=25°C		0.76	-	V
	TA=125°C		0.63	-	
at $I_F=5A$	TA=25°C		0.80	-	
	TA=125°C		0.68	-	
at $I_F=10A$	TA=25°C		0.87	0.92	
	TA=125°C		0.76	-	
Maximum Reverse Current at $V_R=200V$	TA=25°C		$I_R$	1	
	TA=125°C	1		-	

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

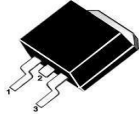
SCHOTTKY BARRIER RECTIFIER



TO-220AB/CT



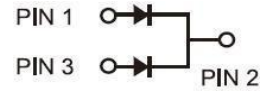
TO-220F/FCT



TO-263/DC

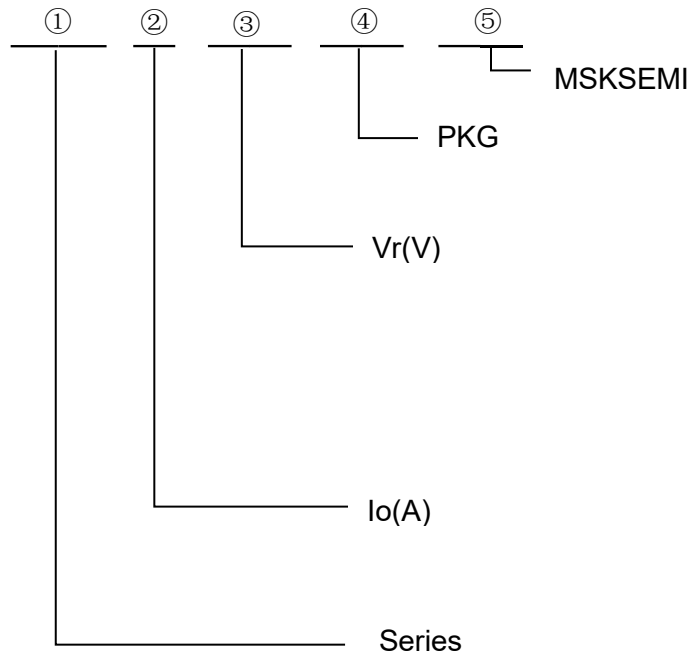


TO-252/CS



P/N Information

MBR 20 200 XXX -MS



①	②	③	④	⑤
系列	平均整流电流	直流反向耐压	封装	MSKSEMI

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

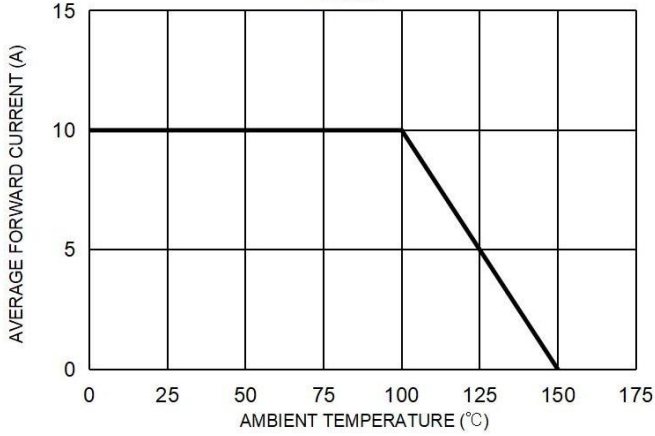


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

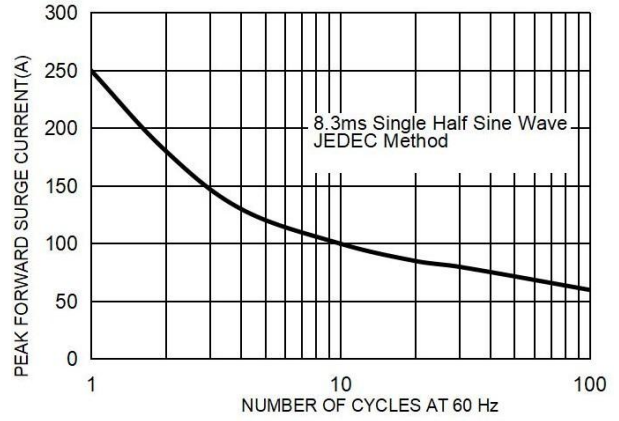


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

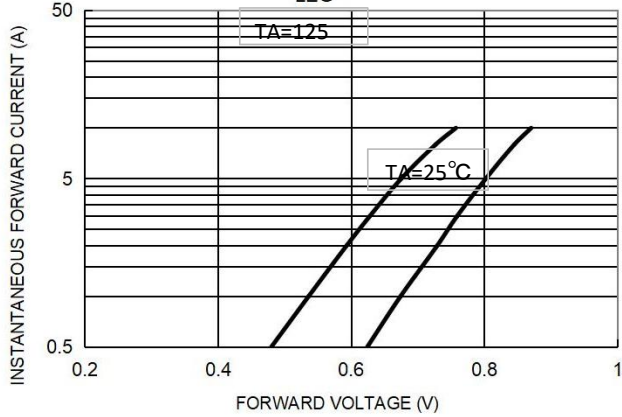
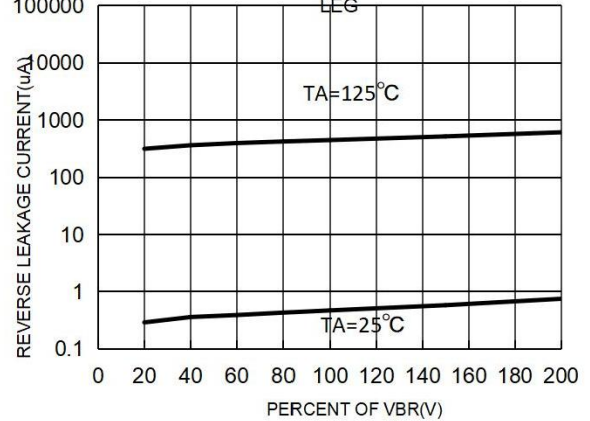
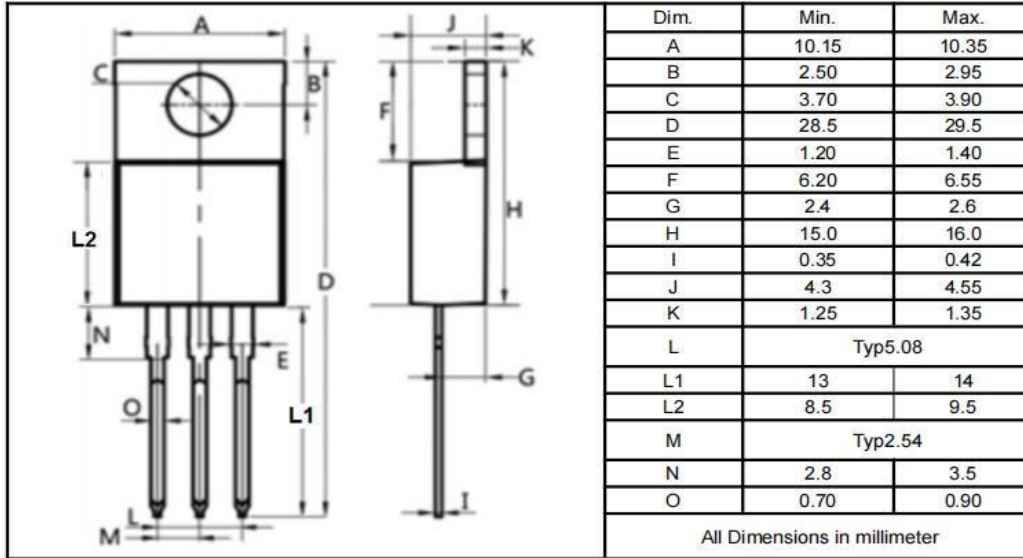


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Package Outline Dimensions millimeters

TO-220AB

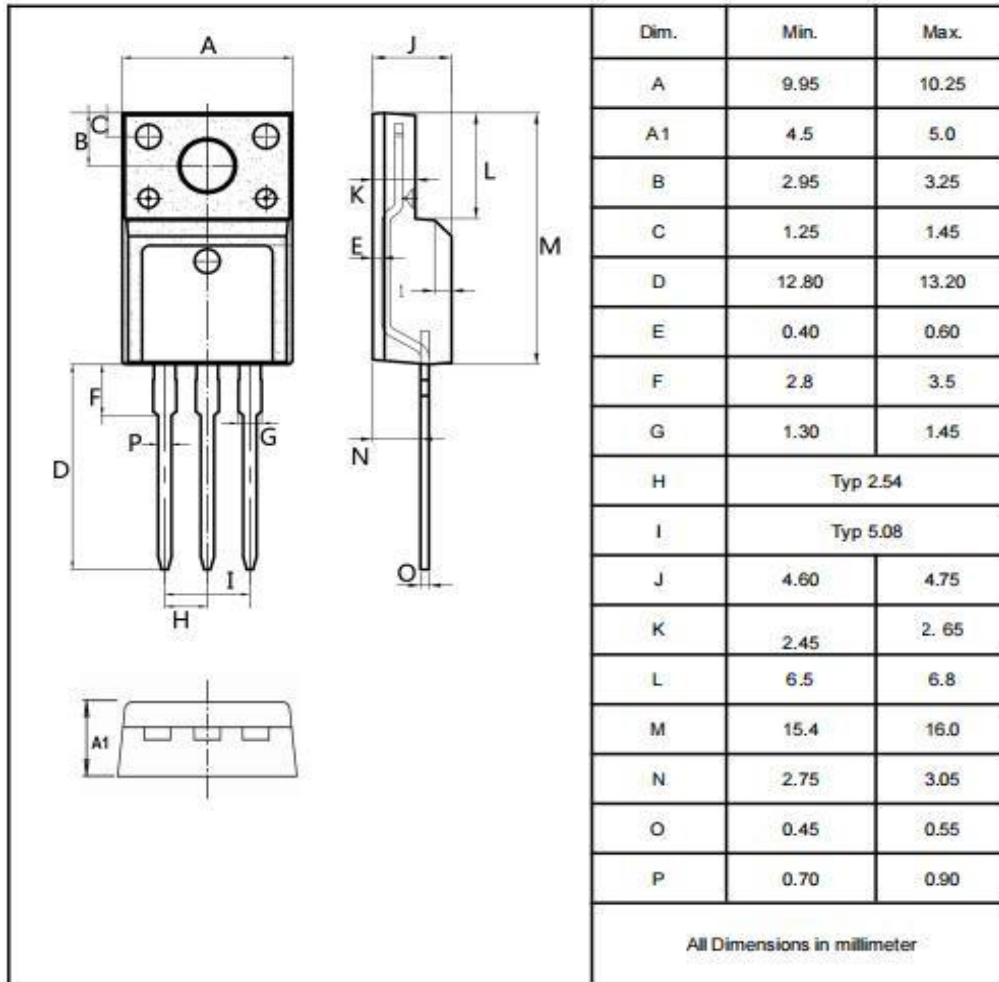


**REEL SPECIFICATION**

P/N	PKG	QTY
MBR20200CT-MS	TO-220AB	50pcs/tube 1000pcs/box

Package Outline Dimensions millimeters

TO-220F

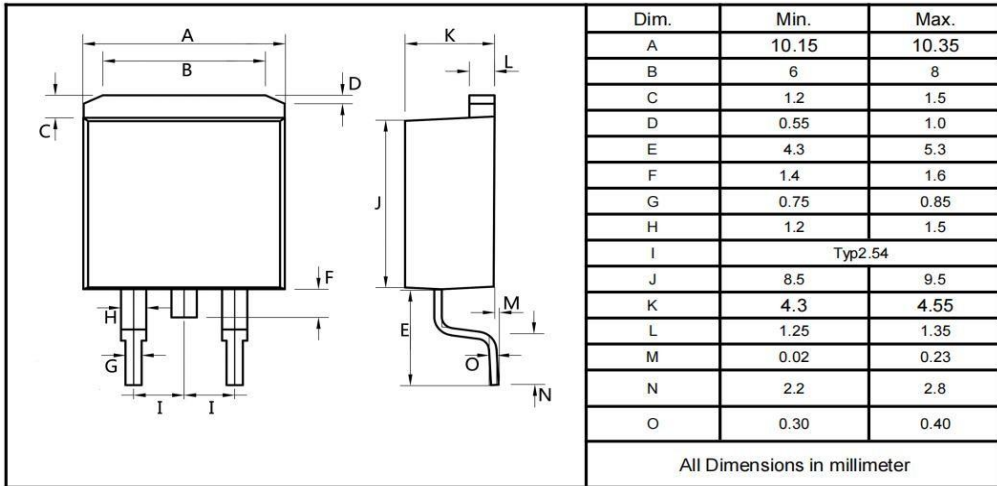


**REEL SPECIFICATION**

P/N	PKG	QTY
MBR20200FCT-MS	TO-220F	50pcs/tube 1000pcs/box

Package Outline Dimensions millimeters

TO-263



**REEL SPECIFICATION**

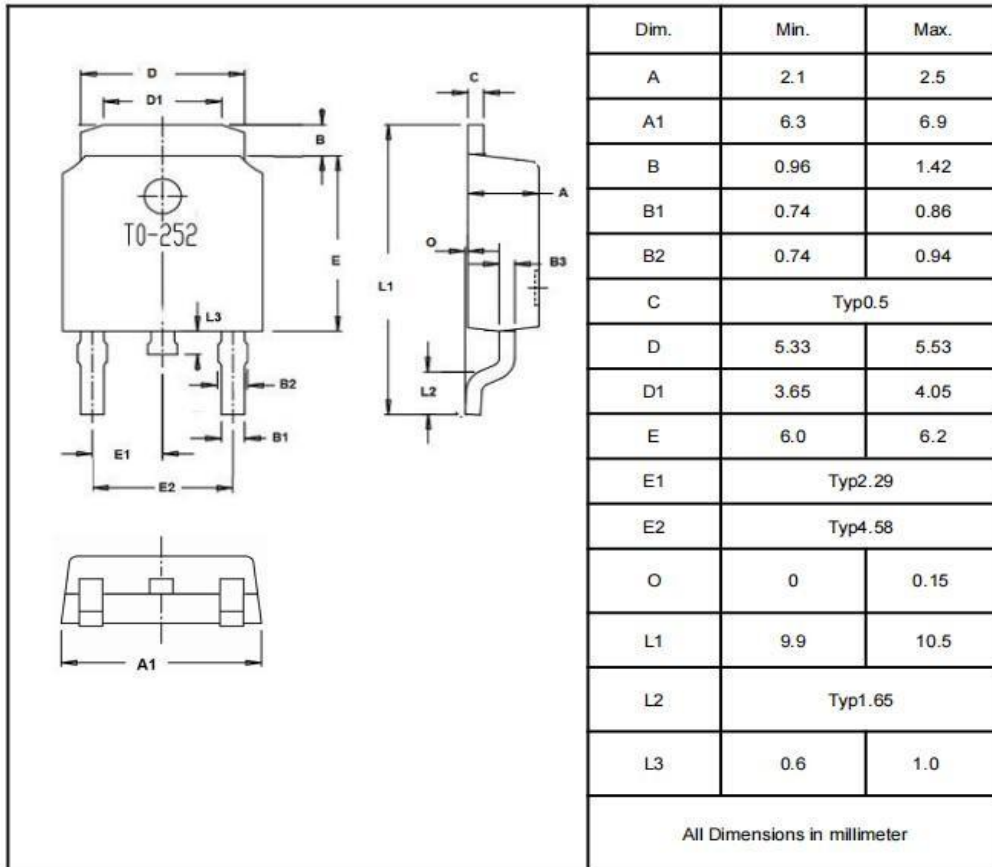
P/N	PKG	QTY
MBR20200DC-MS	TO-263	50pcs/tube 1000pcs/box

**REEL SPECIFICATION**

P/N	PKG	QTY
MBR20200DC-R-MS	TO-263	800pcs

Package Outline Dimensions millimeters

TO-252



**REEL SPECIFICATION**

P/N	PKG	QTY
MBR20200CS-MS	TO-252	2500



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