

# MSKSEMI

SEMICONDUCTOR



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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 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-B106

**Primary Characteristic**

$I_O$	2*5A
$V_{RRM}$	60V
$I_{FSM}$	190A
$V_F$	0.59V
$T_{Jmax}$	150°C
Assembly code	AC

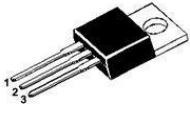
Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified			
Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	60	V
Working Peak Reverse Voltage	$V_{RWM}$	60	V
Maximum DC Blocking Voltage	$V_{DC}$	60	V
Maximum Average Forward Rectified Current	Per Leg	5	A
	Total	10	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave	$I_{FSM}$	190	A
Operating Temperature Range	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-40 to +150	°C
Typical Thermal Resistance(Note1) TO-220AB,TO-263,TO-252 TO-220F	$R_{\theta_{JC}}$	2 4	°C/W

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

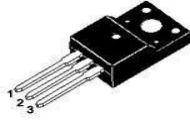
Electrical Characteristics (Per Leg) unless otherwise specified					
Characteristics	Symbol	Value		Unit	
Forward Voltage Drop(Note2)	$V_F$	Typ.	Max.	V	
at $I_F=2A$		TA=25°C	0.53		-
		TA=125°C	0.47		-
at $I_F=3A$		TA=25°C	0.59		-
		TA=125°C	0.52		-
at $I_F=5A$		TA=25°C	0.69		0.75
		TA=125°C	0.59		-
Maximum Reverse Current at $V_R=60V$		$I_R$	TA=25°C		50
	TA=125°C		1.5	mA	

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

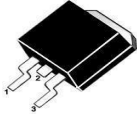
SCHOTTKY BARRIER RECTIFIER



TO-220AB/CT



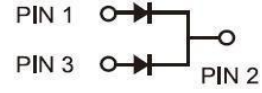
TO-220F/FCT



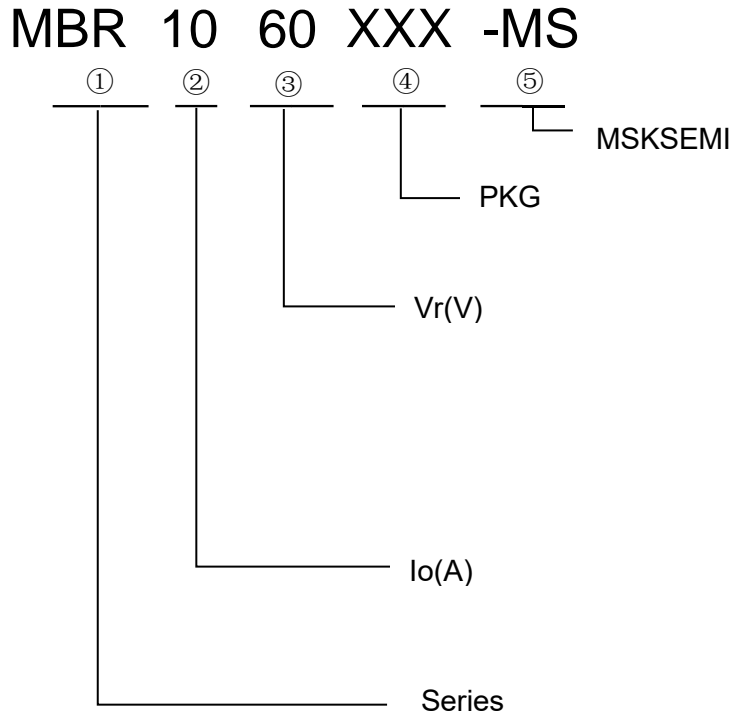
TO-263/DC



TO-252/CS



P/N Information



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

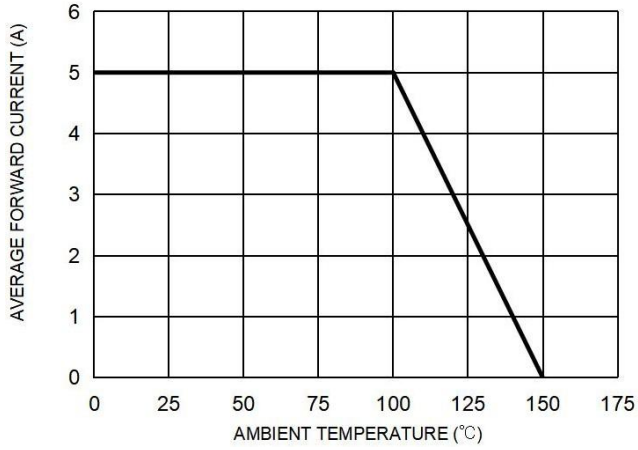


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

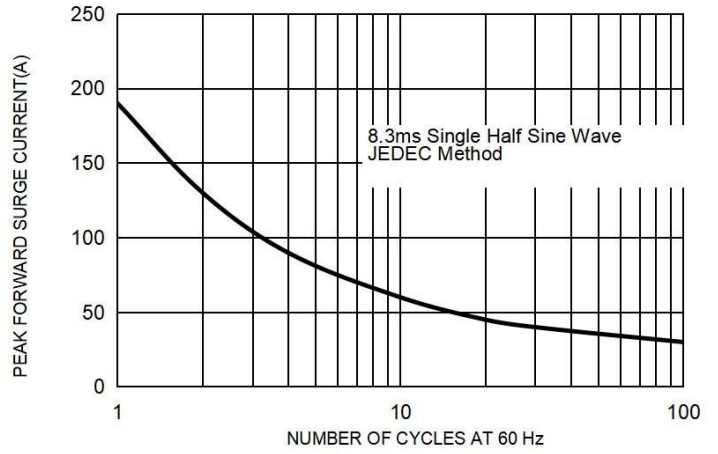


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

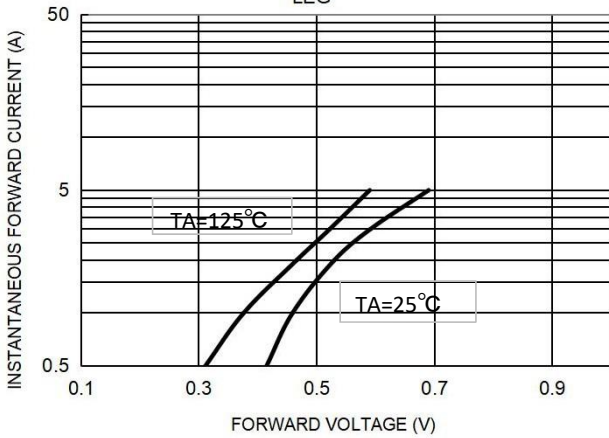
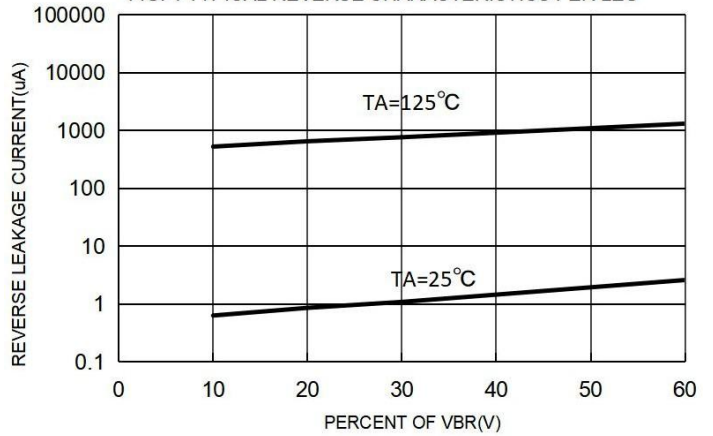
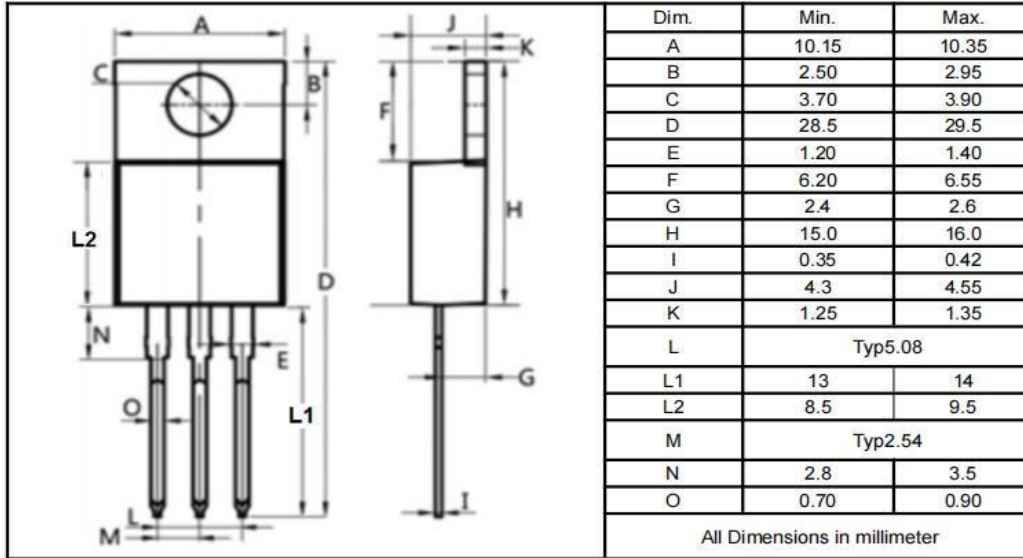


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Package Outline Dimensions millimeters

TO-220AB

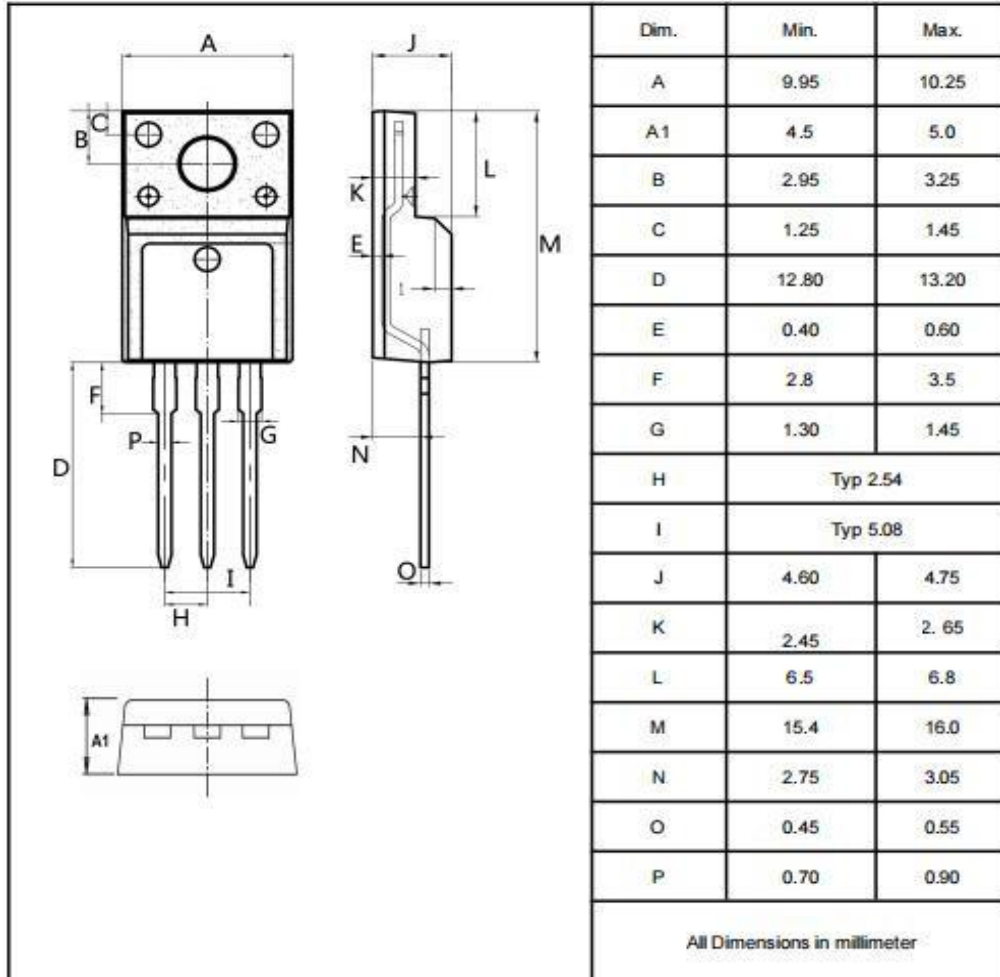


**REEL SPECIFICATION**

P/N	PKG	QTY
MBR1060CT-MS	TO-220AB	50pcs/tube 1000pcs/box

Package Outline Dimensions millimeters

TO-220F

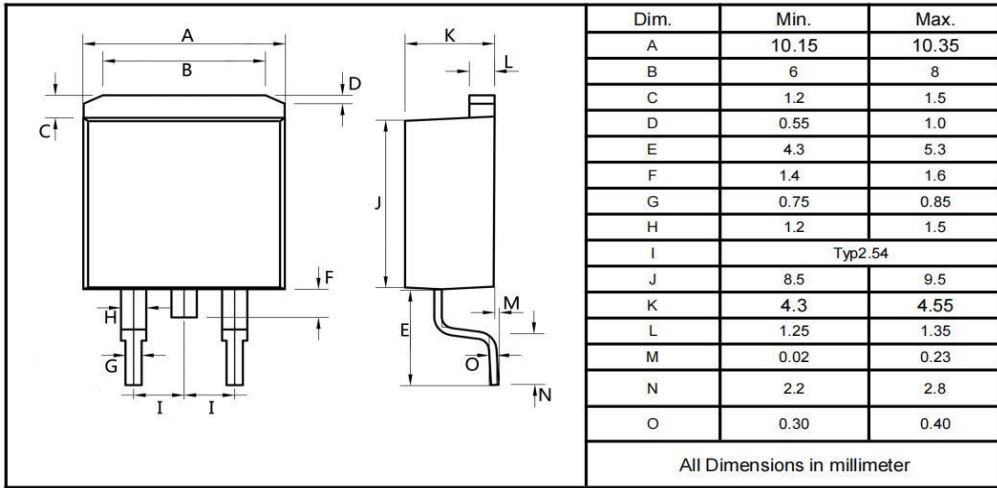


**REEL SPECIFICATION**

P/N	PKG	QTY
MBR1060FCT-MS	TO-220F	50pcs/tube 1000pcs/box

Package Outline Dimensions millimeters

TO-263



**REEL SPECIFICATION**

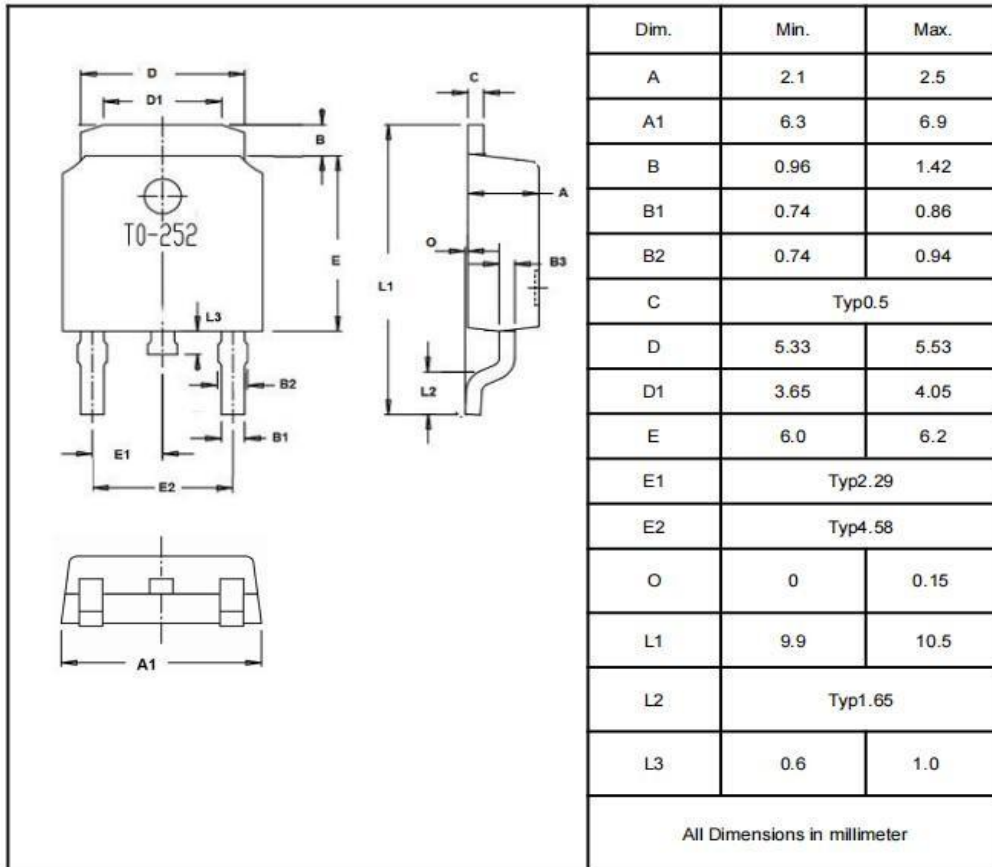
P/N	PKG	QTY
MBR1060DC-MS	TO-263	50pcs/tube 1000pcs/box

**REEL SPECIFICATION**

P/N	PKG	QTY
MBR1060DC-R-MS	TO-263	800pcs

Package Outline Dimensions millimeters

TO-252



**REEL SPECIFICATION**

P/N	PKG	QTY
MBR1060CS-MS	TO-252	2500



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