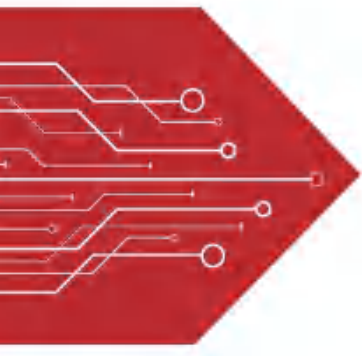


MSKSEMI

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 conerters

Primary Characteristic

I_o	2*5A
V_{RRM}	100V
I_{FSM}	120A
V_F	0.65V
T_{jmax}	150°C
Assembly code	AI

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 JESD22-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 Current	Per Leg	5	A
	Total	10	
Peak Forward Surge Current,8.3 ms Single Half Sine-wave	I_{FSM}	120	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	°C/W
		4	

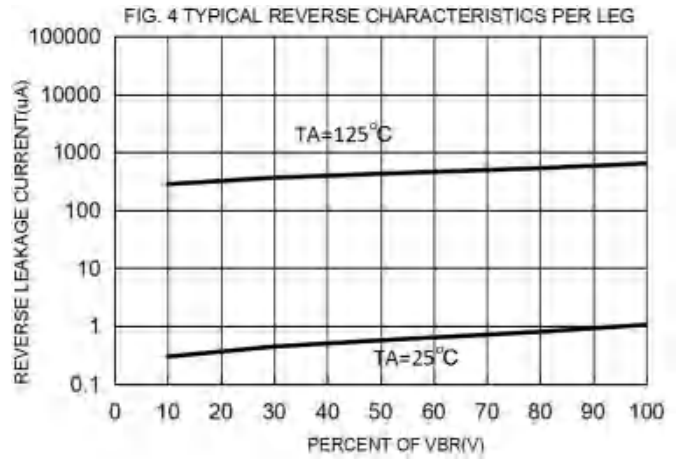
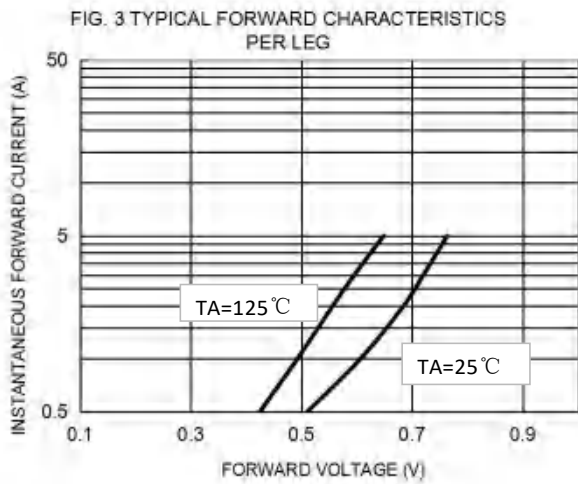
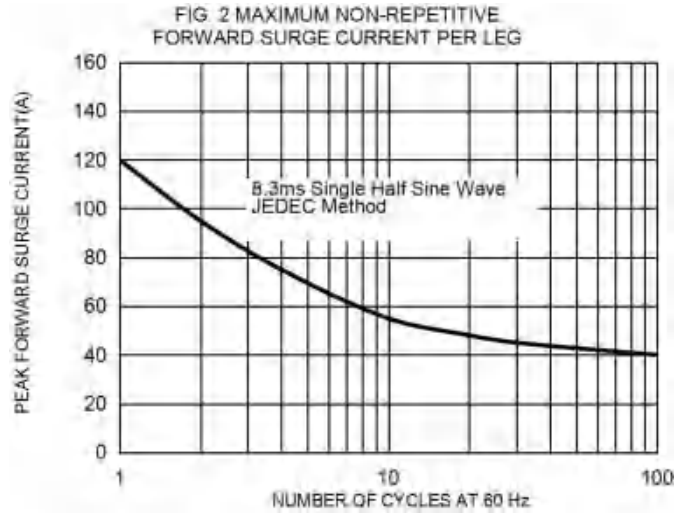
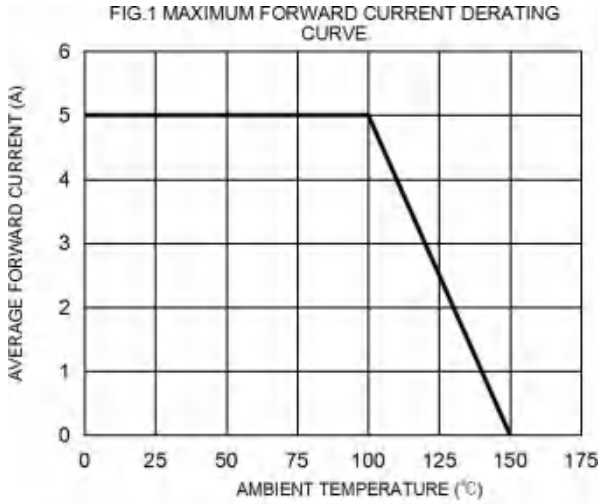
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics	Symbol	Value		Unit
		Typ.	Max.	
Forward Voltage Drop(Note2)		Typ.	Max.	
at $I_F=2A$		0.68	-	V
		0.56	-	
at $I_F=3A$		0.72	-	
		0.60	-	
at $I_F=5A$		0.76	0.85	
		0.65	-	
Maximum Reverse Current at $V_R=100V$	I_R	0.001	0.1	mA
		0.6	-	mA

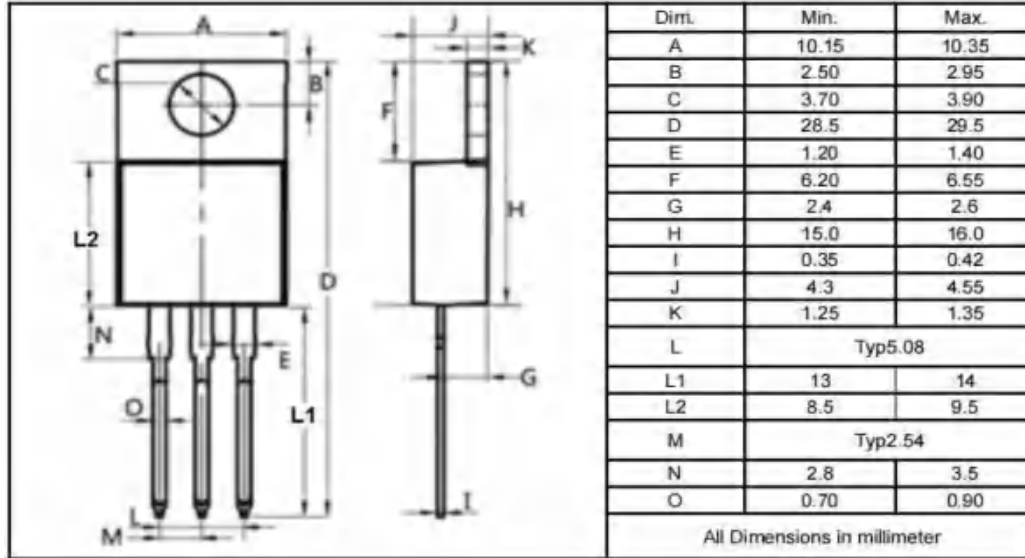
Note2:Pulse test: 300 μ s pulse width, 1 % duty cycle

RATINGS AND CHARACTERISTIC CURVES



Package Outline Dimensions millimeters

TO-220AB

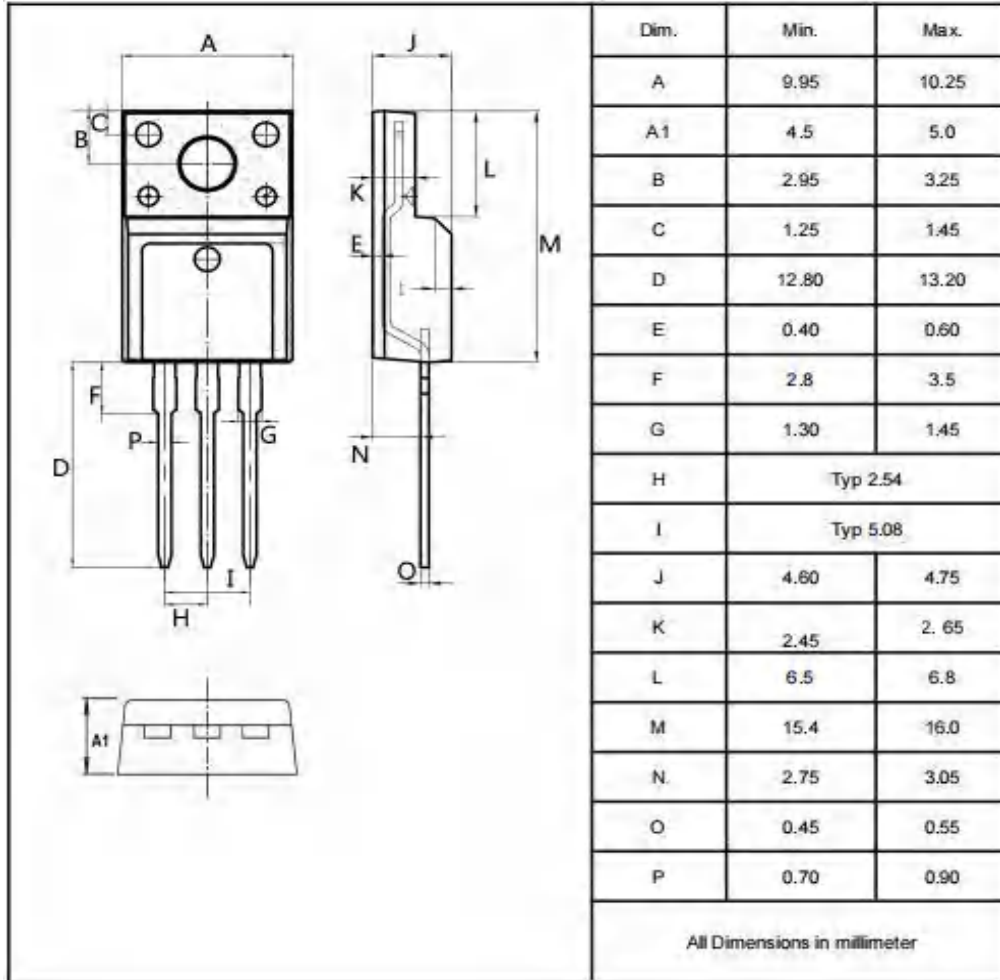


REEL SPECIFICATION

P/N	PKG	QTY
MBR10100CT-MS	TO-220AB	50pcs/tube 1000pcs/box

Package Outline Dimensions millimeters

TO-220F

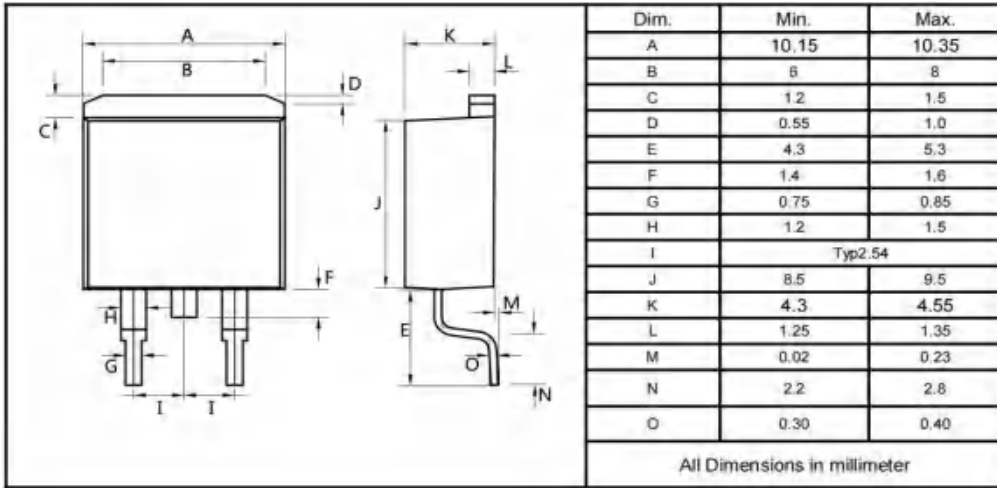


REEL SPECIFICATION

P/N	PKG	QTY
MBR10100FCT-MS	TO-220F	50pcs/tube 1000pcs/box

Package Outline Dimensions millimeters

TO-263



REEL SPECIFICATION

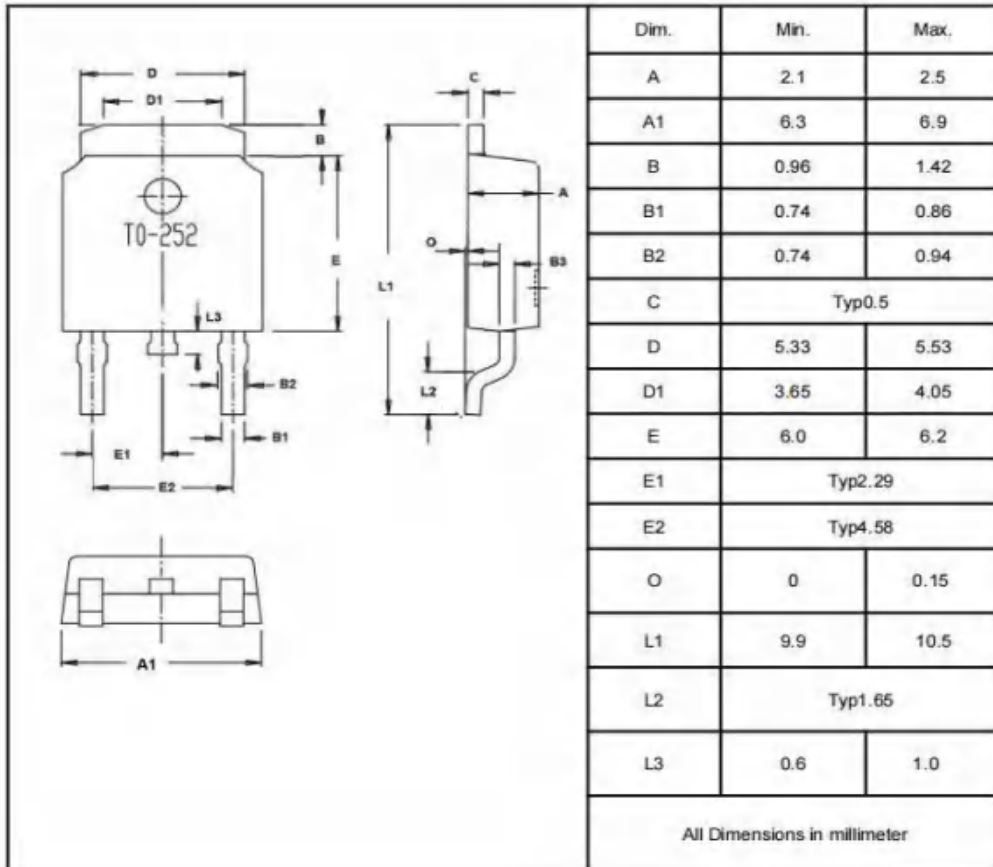
P/N	PKG	QTY
MBR10100DC-MS	TO-263	50pcs/tube 1000pcs/box

REEL SPECIFICATION

P/N	PKG	QTY
MBR10100DC-R-MS	TO-263	800pcs

Package Outline Dimensions millimeters

TO-252



REEL SPECIFICATION

P/N	PKG	QTY
MBR10100CS-MS	TO-252	2500

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