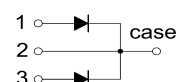
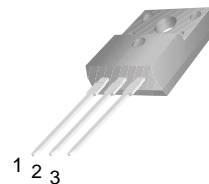


Schottky Barrier Rectifier Diodes in TO-220F

Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



Mechanical Data

- **Case:** TO-220F (plastic package).
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- Power switching application
- Hard switched and high frequency circuits
- Uninterruptible power supply

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Symbol	Parameter	Value	Unit
V_{RRM}	Peak repetitive reverse voltage	100	V
V_{RWM}	Working peak reverse voltage		
V_R	DC blocking voltage		
$V_{R(RMS)}$	RMS reverse voltage	70	V
I_O	Average rectified output current@ $T_c=125^\circ\text{C}$	20	A
I_{FSM}	Non-Repetitive peak forward surge current 8.3ms half sine wave	120	A
P_D	Power dissipation	2	W
$R_{\theta JA}$	Thermal resistance from junction to ambient	50	°C/W
T_j	Junction temperature	150	°C
T_{stg}	Storage temperature	-55~+150	°C

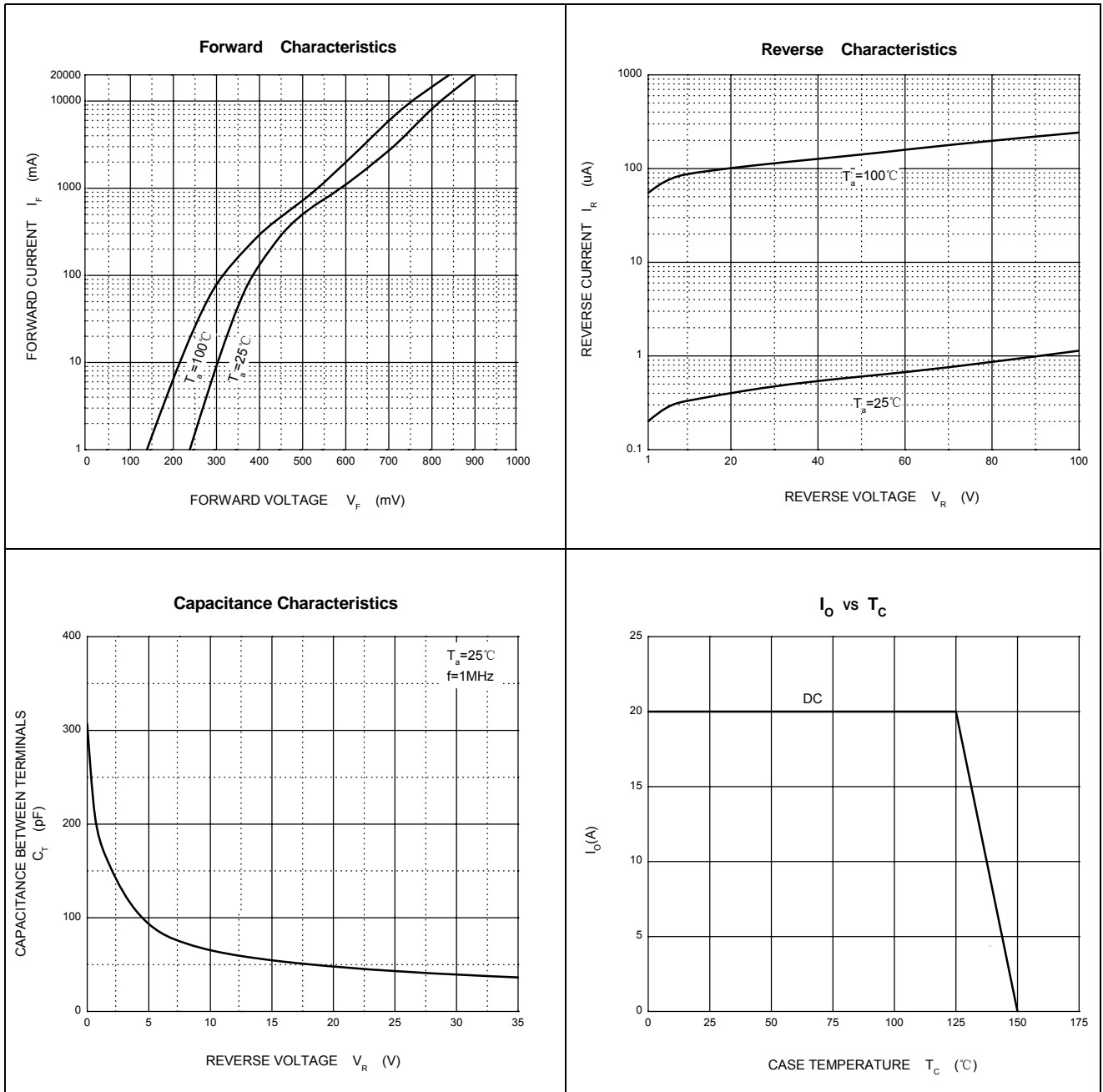
Electrical Characteristics

($T_A = 25^\circ\text{C}$ unless otherwise specified)

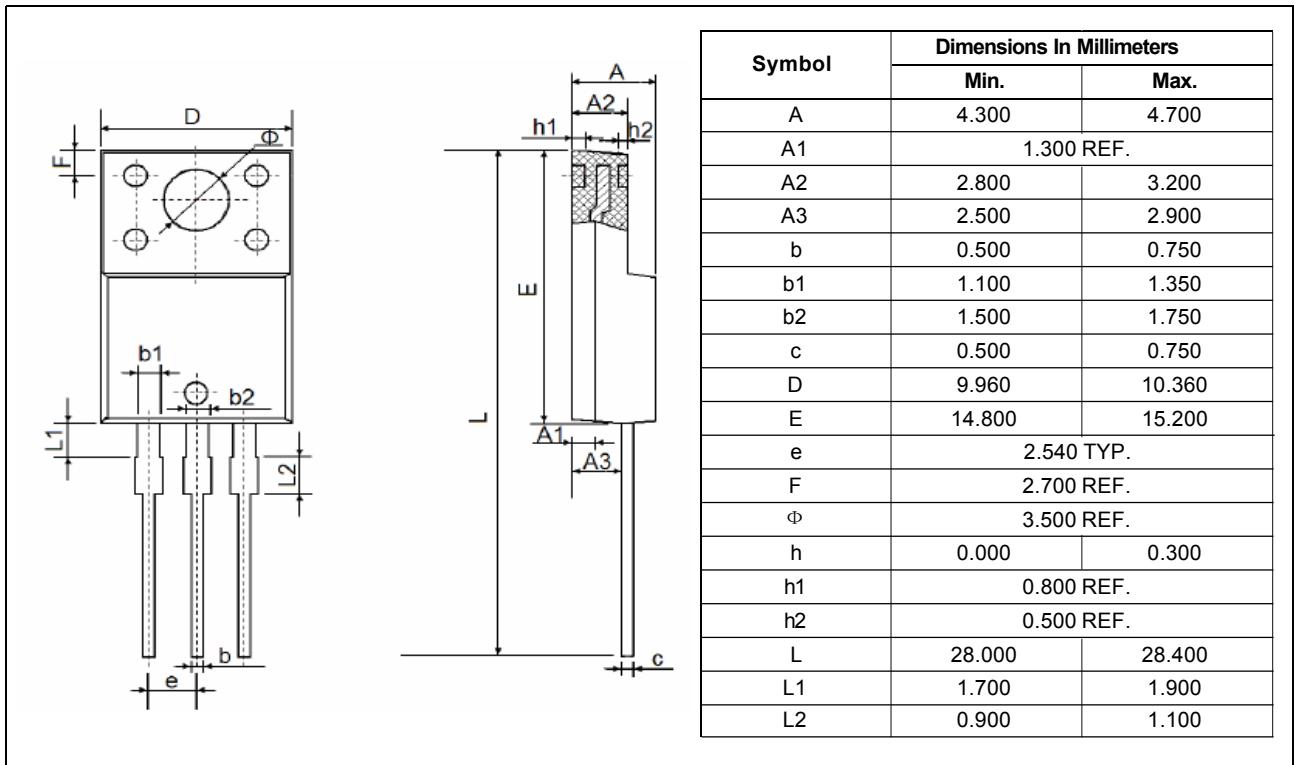
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=1\text{mA}$	100			V
Reverse current	I_R	$V_R=100\text{V}$			0.1	mA
Forward voltage	V_{F1}	$I_{F1}=10\text{A}$			1	V
Forward voltage	V_{F2^*}	$I_{F2}=20\text{A}$			1.2	V

*Pulse test

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
MBR20100FCT	TO-220F	TUBE	50pcs	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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