



TO-220 Plastic-Encapsulate Transistors

MBR3030CT

SCHOTTKY BARRIER RECTIFIER

Features

Schottky Barrier Chip

Guard Ring Die Construction for Transient Protection

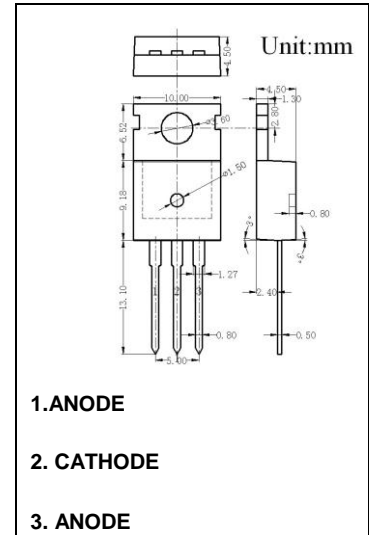
Low Power Loss, High Efficiency

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



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak repetitive reverse voltage	30	V
V_{RWM}	Working peak reverse voltage		
V_R	DC blocking voltage		
$V_{R(RMS)}$	RMS reverse voltage	21	V
I_o	Average rectified output current @ $T_c=100^\circ\text{C}$	30	A
I_{FSM}	Non-Repetitive peak forward surge current 8.3ms half sine wave	200	A
P_D	Power dissipation	2	W
$R_{\theta JA}$	Thermal resistance from junction to ambient	50	$^\circ\text{C/W}$
T_j	Junction temperature	125	$^\circ\text{C}$
T_{stg}	Storage temperature	-55~+150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=1\text{mA}$	30			V
Reverse current	I_R	$V_R=30\text{V}$			0.2	mA
Forward voltage	V_F^*	$I_F=30\text{A}$			0.84	V
Typical total capacitance	C_{to}	$V_R=4\text{V}, f=1\text{MHz}$		450		pF

Typical Characteristics.

