TIGER ELECTRONIC CO.,LTD

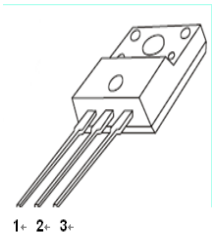
RoHS COMPLIANT

TO-220F Plastic-Encapsulate Diodes

MBRF2545CT

SCHOTTKY BARRIER RECTIFIER

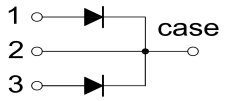
TO-220F



1.ANODE

2.CATHODE

3.ANODE



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

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage **Working Peak Reverse Voltage** **DC Blocking Voltage**	V_{RRM} V_{RWM} V_R	45	V
RMS Reverse Voltage	$V_{R(RMS)}$	32	V
Average Rectified Output Current (Note 1) **Tc=130℃**	I_O	30	A
Peak Repetitive Reverse Surge Current (Note 3)	I_{RRM}	1.0	A
Non-Repetitive Peak Forward Surge Current **8.3ms Single half sine-wave superimposed on** **rated load (JEDEC Method)**	I_{FSM}	150	A
Forward Voltage Drop **@ I_F=30A, T_C=125℃** **@ I_F=30A, T_C= 25℃**	V_{FM}	0.73 0.82	V
Peak Reverse Current **@ T_C= 25℃** **at Rated DC Blocking Voltage** **@ T_C=125℃**	I_{RM}	0.2 40	mA
Typical Junction Capacitance (Note 2)	C_T	750	pF
Typical Thermal Resistance Junction to Case (Note 1)	$R_{\theta JC}$	1.5	℃/W
Operating and Storage Temperature Range	T_j,T_{STG}	-55~+125	℃

Notes: 1. Thermal resistance junction to case mounted heat sink.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. 2.0μs pulse width, f = 1.0KHz.

A,Jun,2011