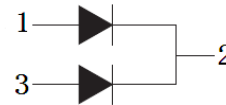


**SCHOTTKY BARRIER DIODE**

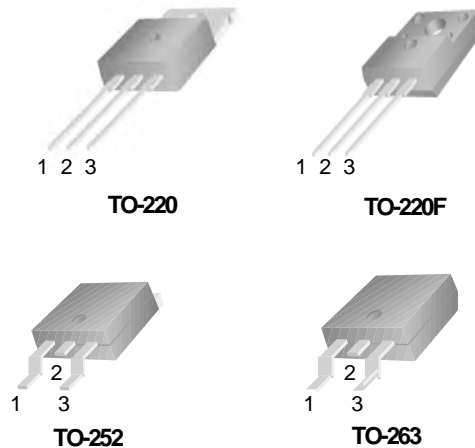
**APPLICATIONS**

- High frequency switch power supply
- Free wheeling diodes, polarity protection applications



**FEATURES**

- Common cathode structure
- Low power loss, high efficiency
- High Operating Junction Temperature
- Guard ring for overvoltage protection, High reliability
- RoHS product



**ORDER INFORMATION**

Product	Package	Pin Assignment			Packing
		1	2	3	
MBR10200CT	TO-220	A	K	A	Tube
MBR10200FCT	TO-220F	A	K	A	Tube
MBR10200YCT	TO-263	A	K	A	Tape Reel
MBR10200DCT	TO-252	A	K	A	Tape Reel

**ABSOLUTE RATINGS (Tc=25°C)**

Parameter		Symbol	Value	Unit
Repetitive peak reverse voltage		$V_{RRM}$	200	V
Maximum DC blocking voltage		$V_{DC}$	200	V
Average forward current	$T_C=150^{\circ}C$ (TO-220/263/ TO-252)	$I_{F(AV)}$	per device 10	A
	$T_C=125^{\circ}C$ (TO-220F)		per diode 5	
Surge non repetitive forward current 8.3 ms single half-sine-wave (JEDEC Method)		$I_{FSM}$	144	A
Maximum junction temperature		$T_j$	150	°C
Storage temperature range		$T_{STG}$	-40~+150	°C

**ELECTRICAL CHARACTERISTICS**

Parameter	Tests conditions		Value(min)	Value(typ)	Value(max)	Unit
$I_R$	$T_j = 25^\circ\text{C}$	$V_R = V_{RRM}$			10	$\mu\text{A}$
$V_F$	$T_j = 25^\circ\text{C}$	$I_F = 5\text{A}$		0.85	0.95	V

**THERMAL CHARACTERISTICS**

Parameter	Symbol	Value(min)	Value(max)	Unit
Thermal resistance from junction to case	TO-220		2.0	$^\circ\text{C/W}$
	TO-263		2.0	
	TO-252		3.0	
	TO-220F		4.0	

**ELECTRICAL CHARACTERISTICS (curves)**

