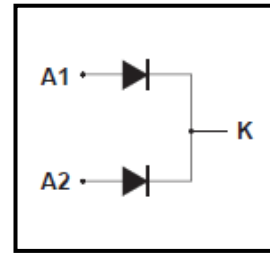


## Power Schottky Rectifier

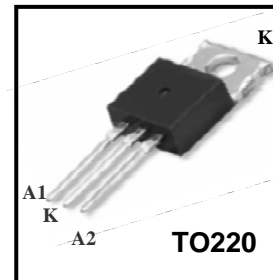
### Features

- 10A(1×5A),100V
- $V_F(\text{max})=0.60\text{V}(@T_J=125^\circ\text{C})$
- Low power loss, high efficiency
- Common cathode structure
- Guard ring for over voltage protection, High reliability
- Maximum Junction Temperature Range(175°C)



### General Description

Dual center tap Schottky rectifiers suited for High frequency switch power supply and Free wheeling diodes, polarity protection applications.



### Absolute Maximum Ratings

Symbol	Parameter	Value	Units
$V_{\text{DRM}}$	Repetitive peak reverse voltage	100	V
$V_{\text{DC}}$	Maximum DC blocking voltage	100	V
$I_{\text{F(RMS)}}$	RMS forward current	10	A
$I_{\text{F(AV)}}$	Average forward current	per diode	5
		per device	10
$I_{\text{FSM}}$	Surge non repetitive forward current	150	A
$I_{\text{RRM}}$	Repetitive peak reverse current	1	A
dv/dt	Critical rate of rise of reverse voltage	10000	V/ns
$T_{\text{J}}$	Junction Temperature	175	°C
$T_{\text{stg}}$	Storage Temperature	-40~150	°C

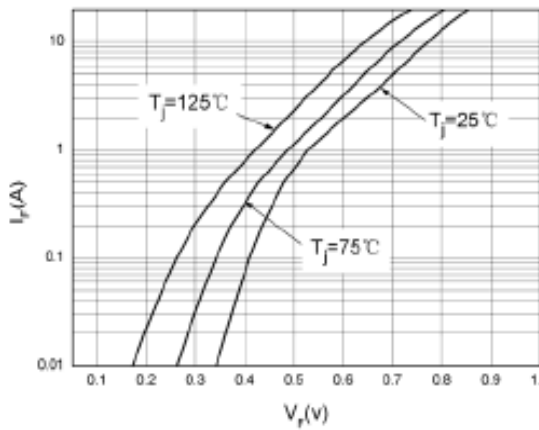
### Thermal Characteristics

Symbol	Parameter	Value			Units
		Min	Typ	Max	
$R_{\text{QJC}}$	Thermal Resistance, Junction-to-Case	-	-	1.3	°C/W
$R_{\text{QCS}}$	Thermal Resistance, Case-to-Sink	0.3	-	-	°C/W

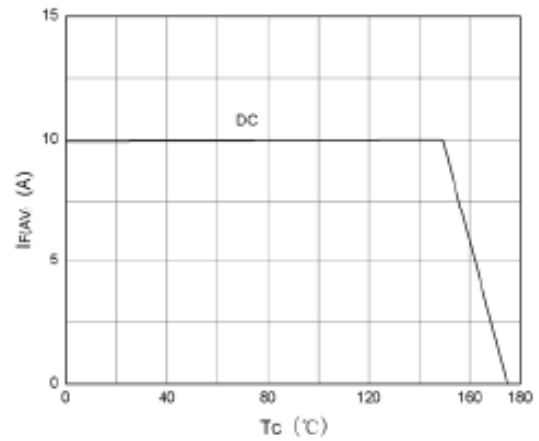
## Electrical Characteristics (per diode)

Characteristics	Symbol	Test Condition		Min	Typ.	Max	Unit
Reverse leakage current	$I_R$	$V_R = V_{RRM}$	$T_j = 25^\circ\text{C}$	-	-	10	$\mu\text{A}$
			$T_j = 125^\circ\text{C}$		-	5	$\text{mA}$
Forward voltage drop	$V_F$	$I_F = 5\text{A}$	$T_j = 25^\circ\text{C}$	-	0.71	0.75	V
			$T_j = 125^\circ\text{C}$	-	0.56	0.60	
		$I_F = 210\text{A}$	$T_j = 25^\circ\text{C}$	-	0.78	0.85	
			$T_j = 125^\circ\text{C}$	-	0.65	0.7	

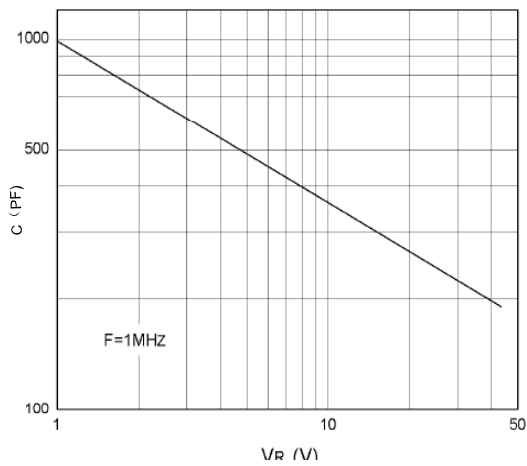
Note : $t_p = 380 \mu\text{s}$ ,  $\delta < 2\%$



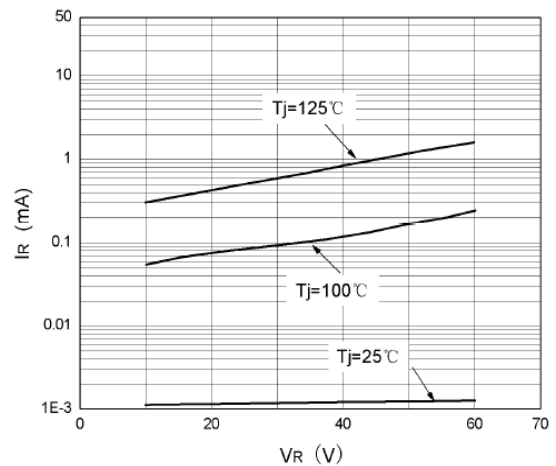
**Fig.1 Forward voltage drop versus forward current (maximum values, per diode).**



**Fig.2 Average current versus ambient temperature (d=0.5) (per diode)**



**Fig.3 Junction capacitance versus reverse voltage applied (typical values, per diode).**



**Fig.4 Reverse leakage current versus reverse voltage applied (typical values, per diode)..**

## TO-220 Package Dimension

