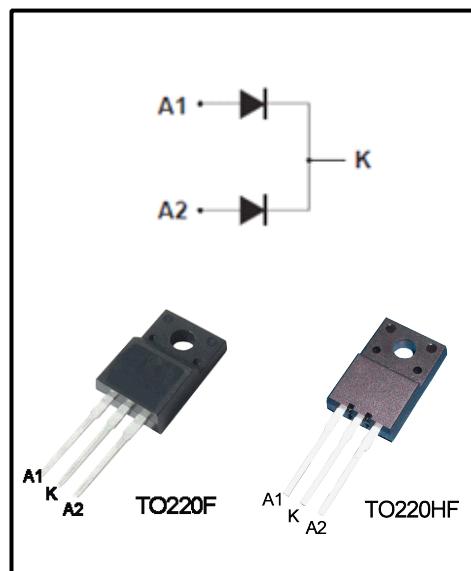


***Power Schottky Rectifier***
**Features**

- 10A(2×5A),100V
- $V_F(\text{max})=0.70\text{V}(@T_J=125^\circ\text{C})$
- Low power loss, high efficiency
- Common cathode structure
- Guard ring for over voltage protection, High reliability
- Maximum Junction Temperature Range( $175^\circ\text{C}$ )

**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
$I_{\text{F(AV)}}$	Average forward current	per diode	5
		per device	10
$I_{\text{FSM}}$	Surge non repetitive forward current	80	A
$T_J$	Junction Temperature	175	$^\circ\text{C}$
$T_{\text{stg}}$	Storage Temperature	-40~150	$^\circ\text{C}$

**Thermal Characteristics**

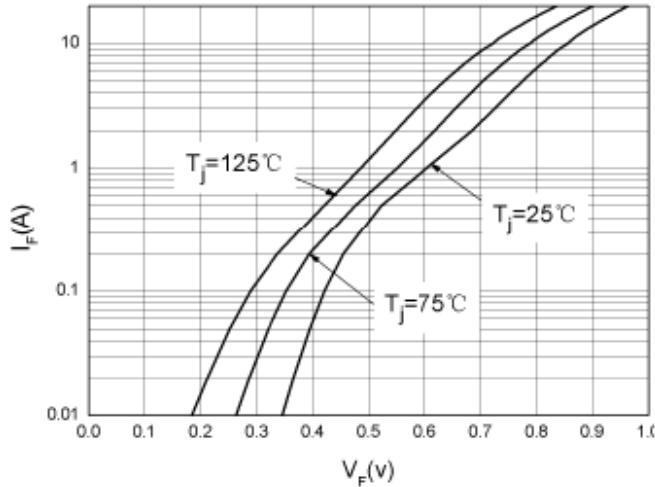
Symbol	Parameter	Value			Units
		Min	Typ	Max	
$R_{\text{QJC}}$	Thermal Resistance, Junction-to-Case	-	-	2.5	$^\circ\text{C/W}$

**Ordering Information**

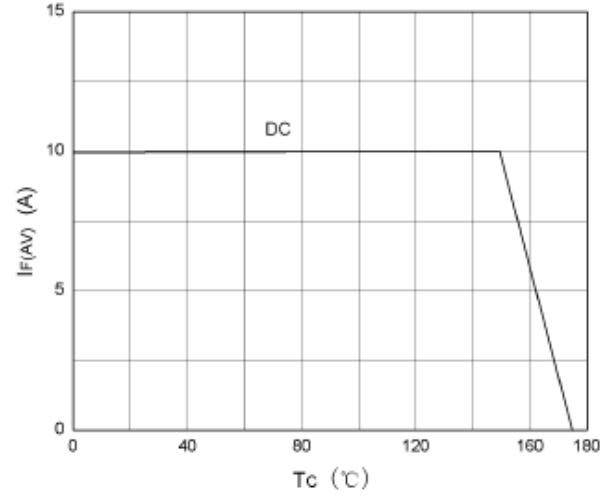
Order codes	Package	Marking	Halogen Free	Packaging
WSF10D100L	TO220F	F10D100L	NO	Tube
WSF10D100-HF	TO220HF	F10D100	NO	Tube

**Electrical Characteristics (per diode)**

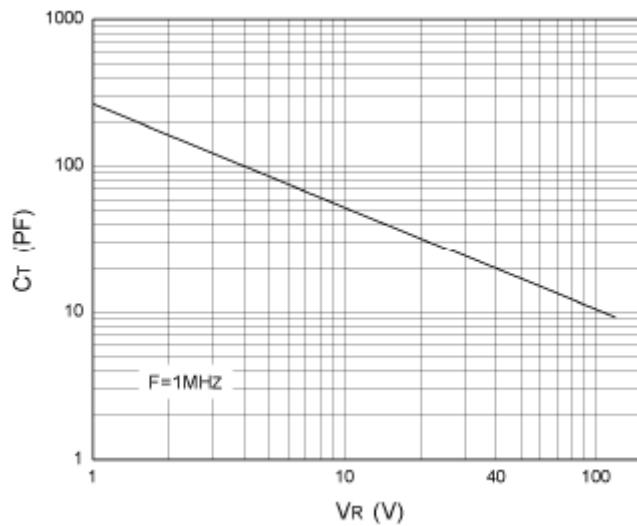
Characteristics	Symbol	Test Condition		Min	Typ.	Max	Unit
Reverse leakage current	$I_R$	VR = VRRM	T <sub>j</sub> = 25°C	-	-	10	µA
			T <sub>j</sub> = 125°C		-	5	mA
Forward voltage drop	$V_F$	IF= 5A	T <sub>j</sub> = 25°C	-	0.77	0.83	V
			T <sub>j</sub> = 125°C	-	0.65	0.70	
		IF= 10A	T <sub>j</sub> = 25°C	-	0.85	0.90	
			T <sub>j</sub> = 125°C	-	0.73	0.80	



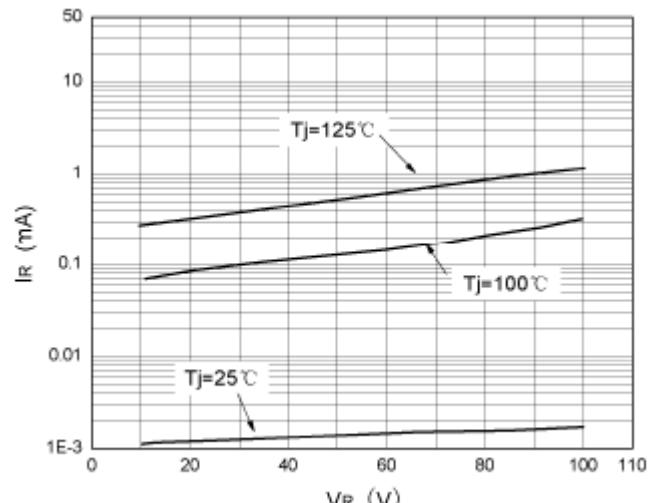
**Fig.1** Forward voltage drop versus forward current (maximum values, per diode).



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

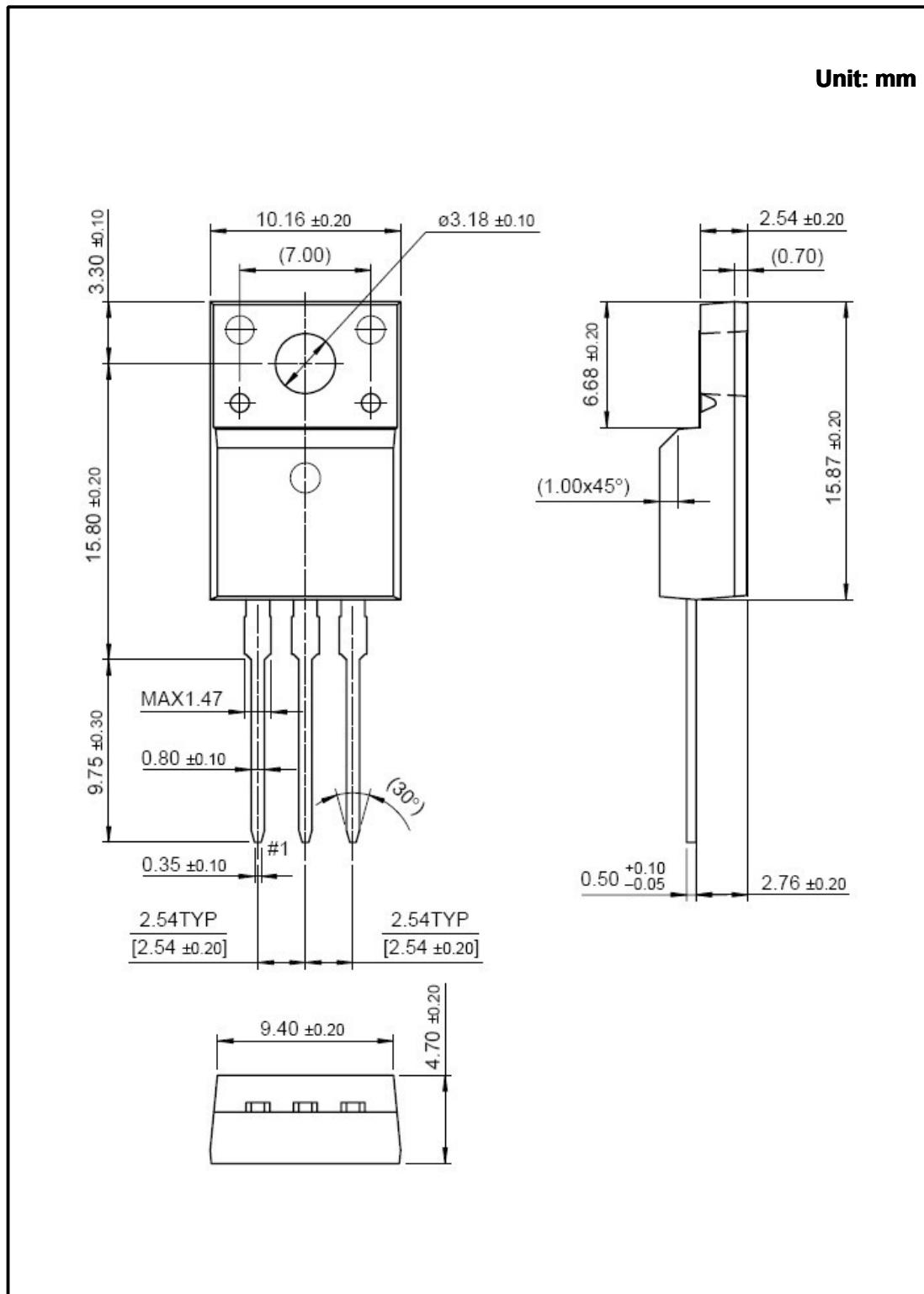


**Fig.3** Junction capacitance versus reverse voltage applied (typical values, per diode).



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

## **TO-220F Package Dimension**



**TO-220HF Package Dimension**

