

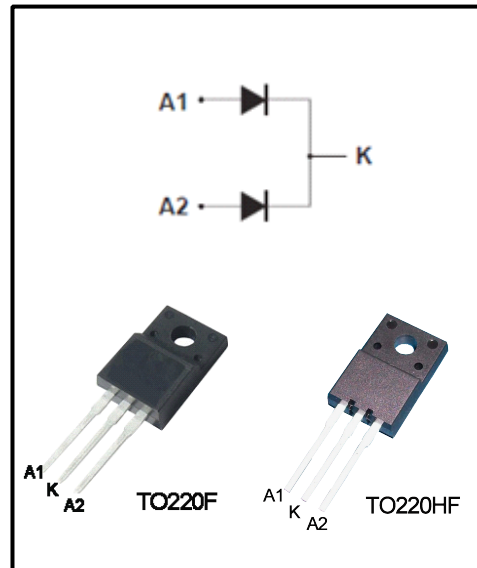
**Power Schottky Rectifier**

**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°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
$V_{DRM}$	Repetitive peak reverse voltage	100	V
$V_{DC}$	Maximum DC blocking voltage	100	V
$I_{F(AV)}$	Average forward current	per diode	5
		per device	10
$I_{FSM}$	Surge non repetitive forward current	80	A
$T_J$	Junction Temperature	175	°C
$T_{stg}$	Storage Temperature	-40~150	°C

**Thermal Characteristics**

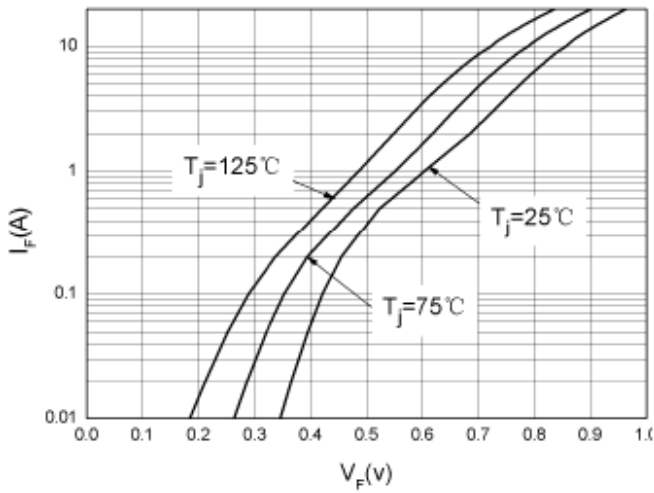
Symbol	Parameter	Value			Units
		Min	Typ	Max	
$R_{QJC}$	Thermal Resistance, Junction-to-Case	-	-	2.5	°C/W

**Ordering Information**

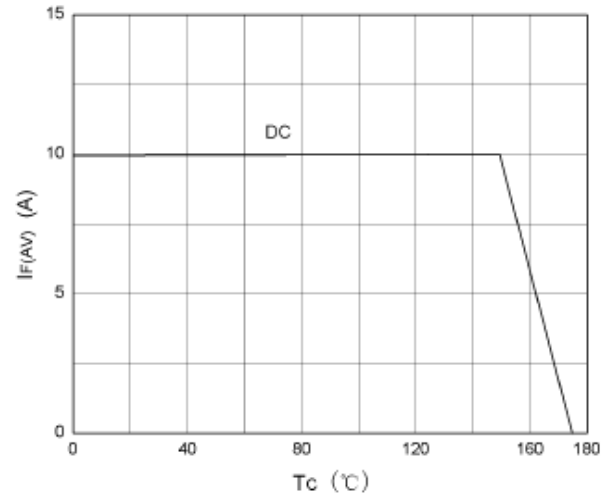
Order codes	Package	Marking	Halogen Free	Packaging
WSF10D100L	TO220F	F10D100L	NO	Tube
WSF10D100-HF	TO220HF	F10D100	NO	Tube

Electrical Characteristics (per diode)

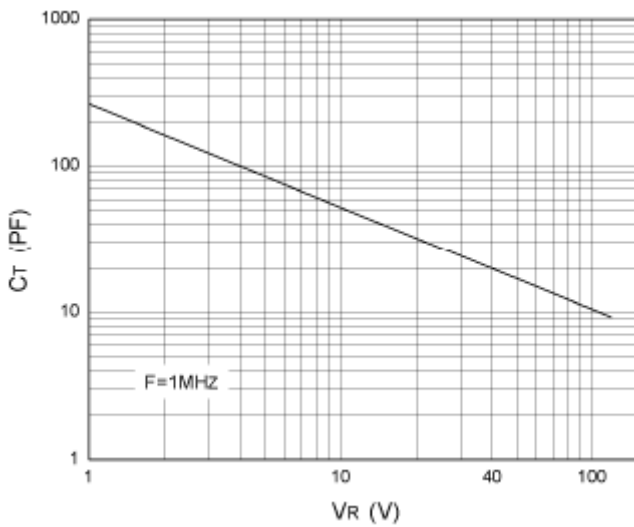
Characteristics	Symbol	Test Condition		Min	Typ.	Max	Unit
Reverse leakage current	$I_R$	VR = VRRM	Tj = 25°C	-	-	10	μA
			Tj = 125°C		-	5	mA
Forward voltage drop	$V_F$	IF= 5A	Tj = 25°C	-	0.77	0.83	V
			Tj = 125°C	-	0.65	0.70	
		IF= 10A	Tj = 25°C	-	0.85	0.90	
			Tj = 125°C	-	0.73	0.80	



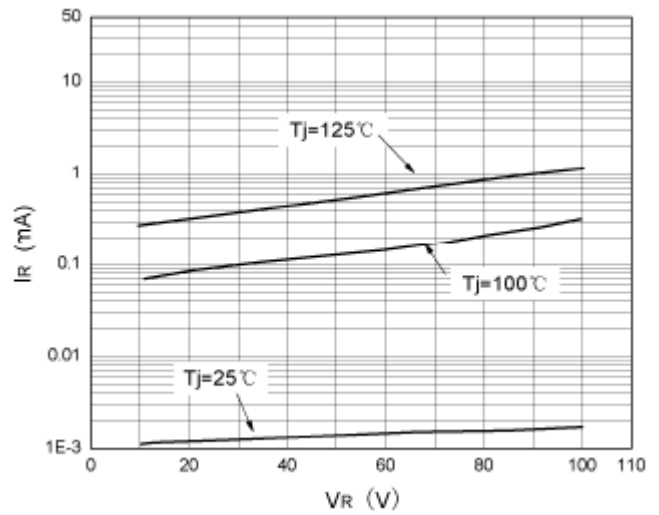
**Fig.1 Forward voltage drop versus forward current (maximum values, per diode).**



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

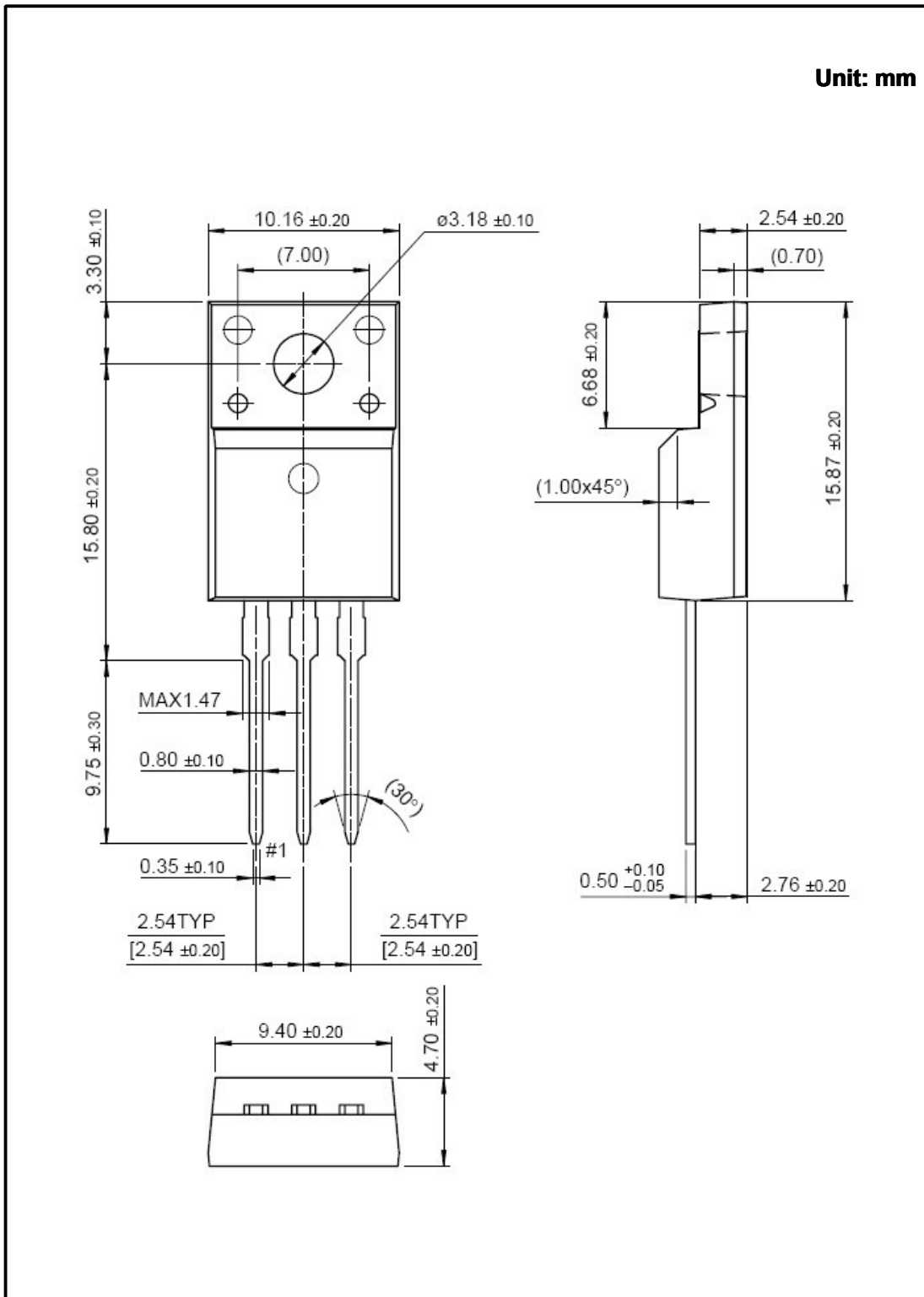


**Fig.3 Junction capacitance versus reverse voltage applied (typical values, per diode).**



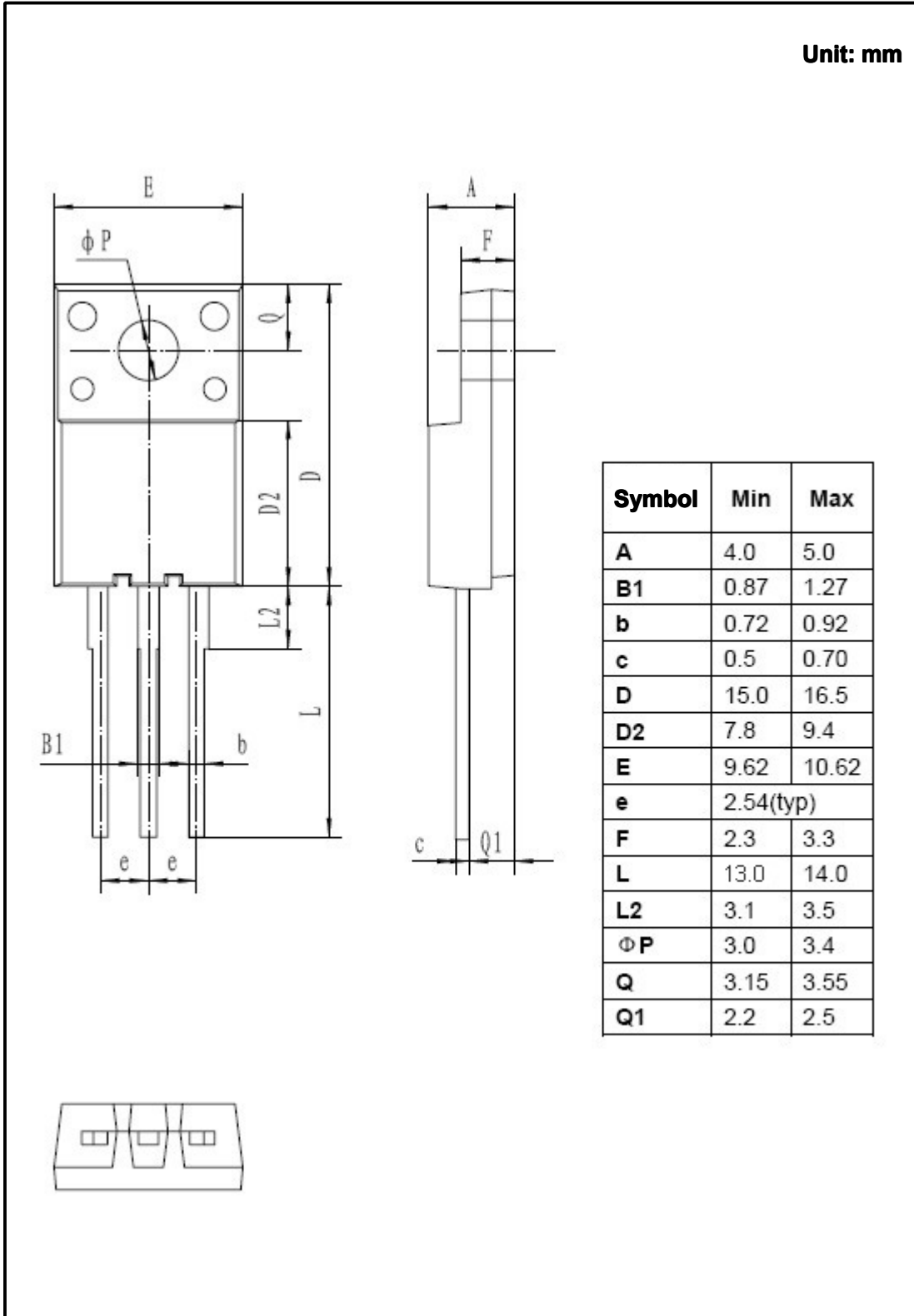
**Fig.4 Reverse leakage current versus reverse voltage applied (typical values, per diode)..**

**TO-220F Package Dimension**



**TO-220HF Package Dimension**

Unit: mm



Symbol	Min	Max
A	4.0	5.0
B1	0.87	1.27
b	0.72	0.92
c	0.5	0.70
D	15.0	16.5
D2	7.8	9.4
E	9.62	10.62
e	2.54(typ)	
F	2.3	3.3
L	13.0	14.0
L2	3.1	3.5
$\phi P$	3.0	3.4
Q	3.15	3.55
Q1	2.2	2.5