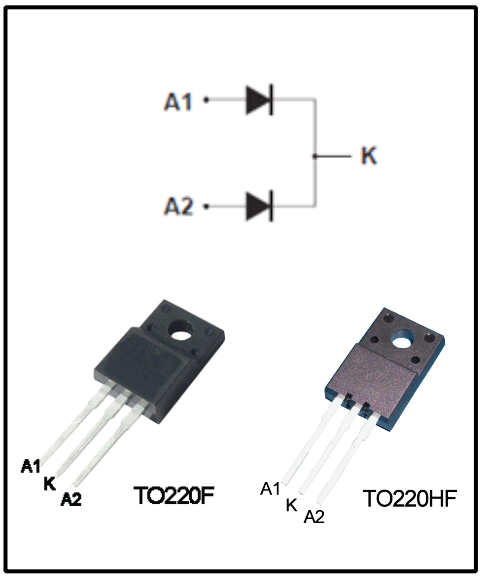
WSF20D100

Power Schottky Rectifier

Features

- 20A(2×10A),100V
- V_F(max)=0.7V(@TJ=125℃)
- Low power loss, high efficiency
- Common cathode structure
- Guard ring for over voltage protection, High reliability
- Maximum Junction Temperature Range(175℃)



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	10	A
		per device	20	
I_{FSM}	Surge non repetitive forward current		200	A
$T_{J,}$	Junction Temperature		175	℃
T_{stg}	Storage Temperature		-40~150	℃

Thermal Characteristics

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

Ordering Information

Order codes	Package	Marking	Halogen Free	Packaging
WSF20D100L	TO220F	F20D100L	NO	Tube
WSF20D100-HF	TO220HF	F20D100	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= 10A	Tj = 25°C	-	0.78	0.85	V
			Tj = 125°C	-	0.65	0.7	

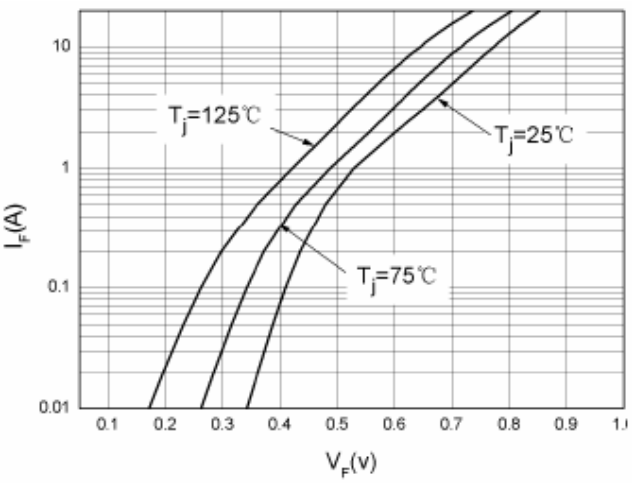


Fig.1 Forward voltage drop versus forward current (maximum values, per diode).

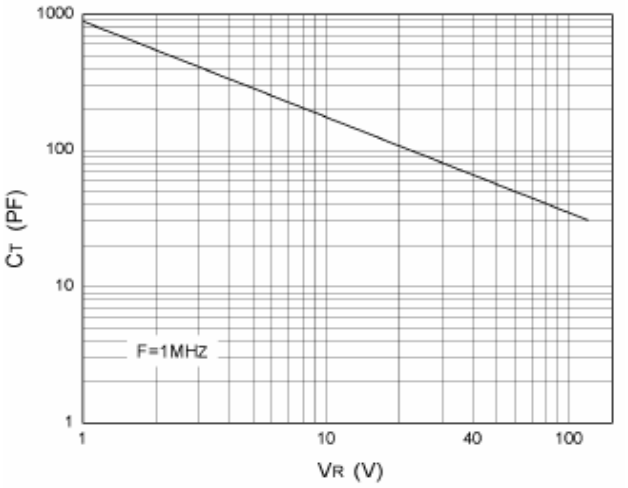


Fig.2 Junction capacitance versus reverse voltage applied (typical values, per diode).

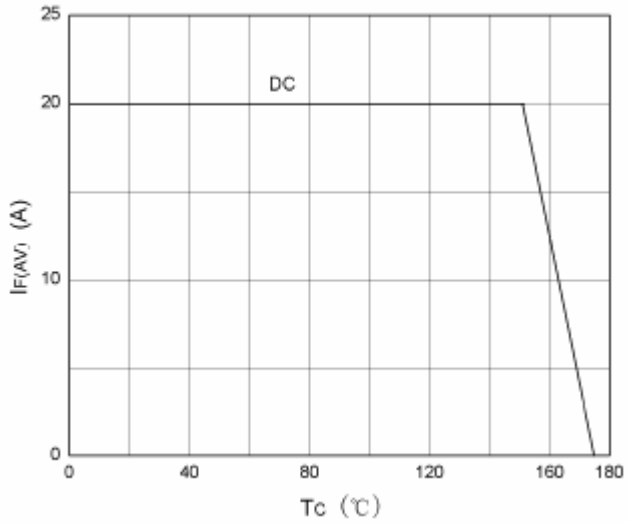


Fig.3 Average current versus ambient temperature (d=0.5) (per diode)

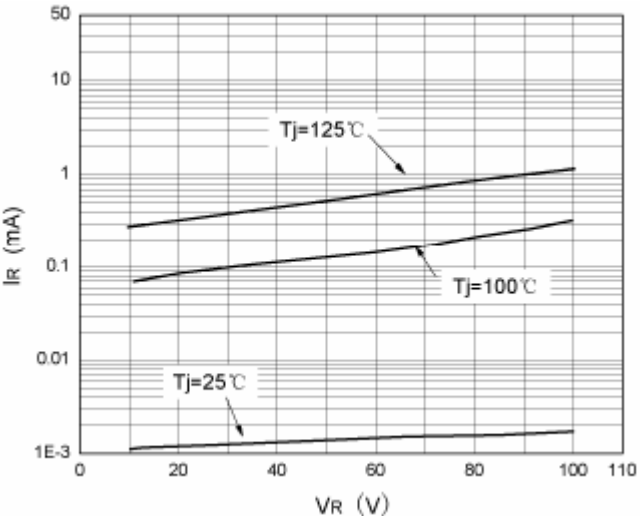
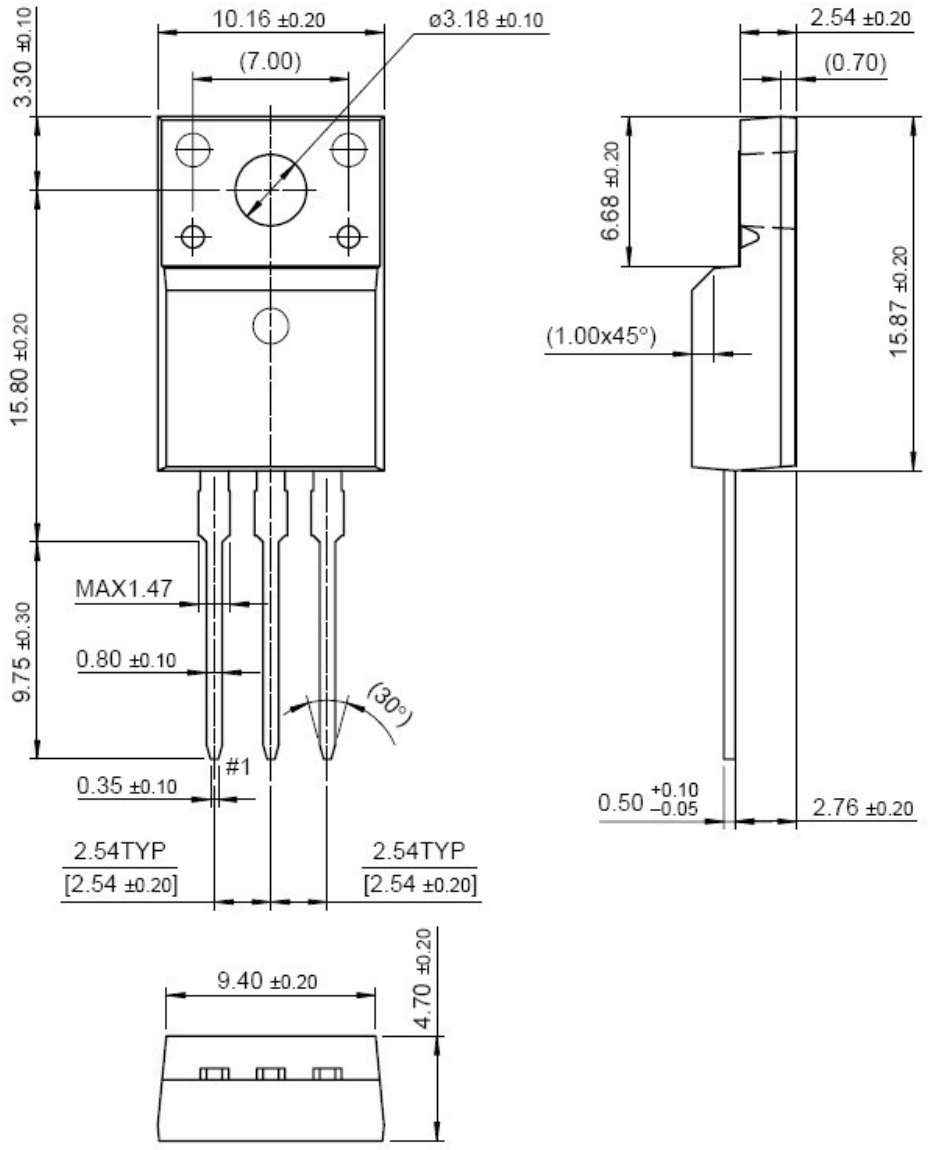


Fig.4 Reverse leakage current versus reverse voltage applied (typical values, per diode)..

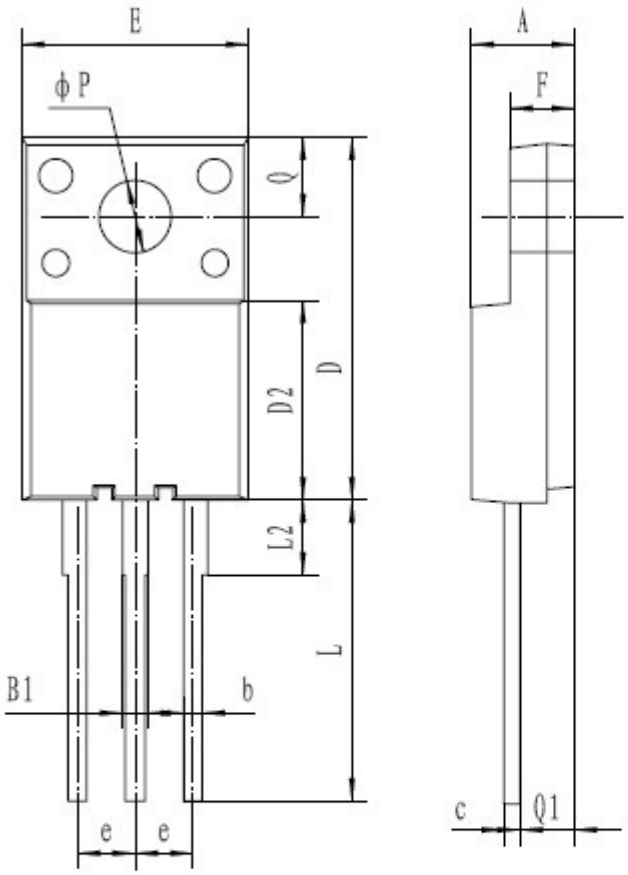
TO-220F Package Dimension

Unit: mm



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
ΦP	3.0	3.4
Q	3.15	3.55
Q1	2.2	2.5