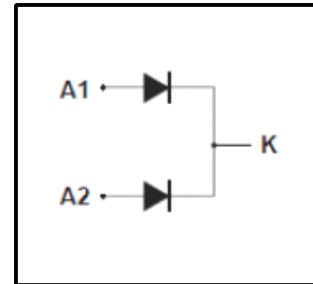


Silicon Controlled Rectifiers

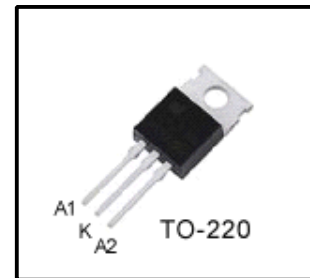
Features

- 30A(2×15A),100V
- $V_{F(max)}=0.75V(@T_J=125^{\circ}C)$
- Low power loss,high efficiency
- Common cathode structure
- Guard ring for over voltage protection, High reliability
- Maximum Junction Temperature Range($175^{\circ}C$)



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
$I_{F(RMS)}$	RMS forward Current	30	A
$I_{F(AV)}$	Average forward current	Per diode	15
		Per device	30
I_{FSM}	Surge non repetitive forward current	275	A
I_{RRM}	Repetitive peak reverse current	1	A
dv/dt	Critical rate of rise of reverse voltage	10000	V/ns
T_J	Junction Temperature	175	$^{\circ}C$
T_{STG}	Storage Temperature	-40~150	$^{\circ}C$

Thermal Characteristics

Symbol	Parameter	Value			Units
		Min	Typ	Max	
R_{QJC}	Thermal Resistance Junction to Case	-	-	1.8	$^{\circ}C/W$

Electrical Characteristics (per diode)

Characteristics	Symbol	Test Conditions		Min	Typ	Max	Units
Reverse leakage current	I_R	$V_R = V_{RRM}$	$T_j = 25^\circ\text{C}$	-	-	30	μA
			$T_j = 125^\circ\text{C}$	-	-	30	mA
Forward voltage drop	V_F	$I_F = 15\text{A}$	$T_j = 25^\circ\text{C}$	-	0.82	0.9	V
			$T_j = 125^\circ\text{C}$	-	0.71	0.75	

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

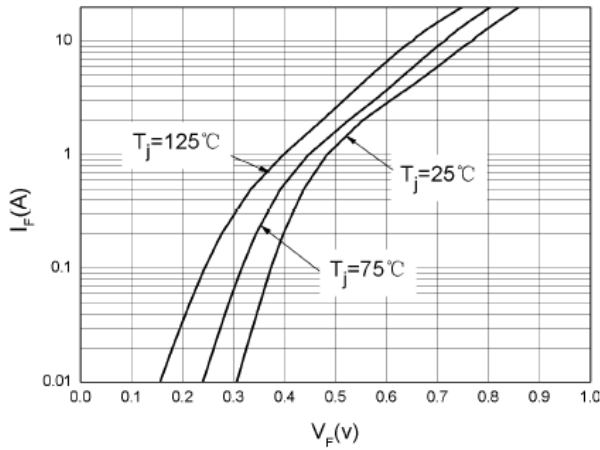


Fig.1 Forward Voltage Drop Versus Forward current(maximum Values ,per diode)

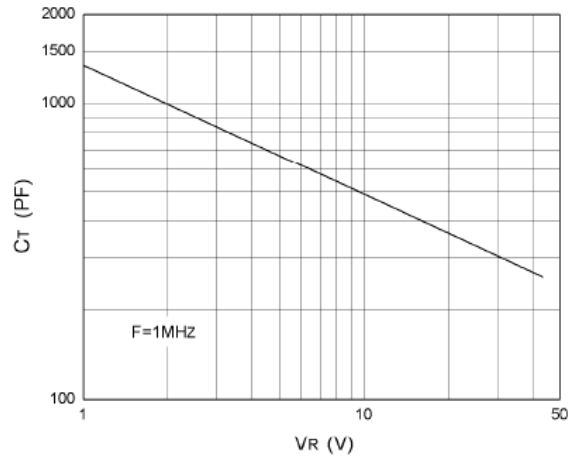


Fig .2 Junction Capacitance Versus reverse Voltage applied (typical Values,per diode)

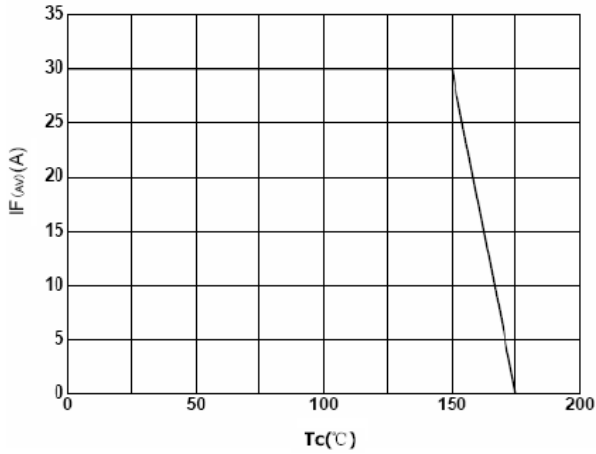


Fig. 3 Average Current versus ambient temperature (d=0.5)(per diode)

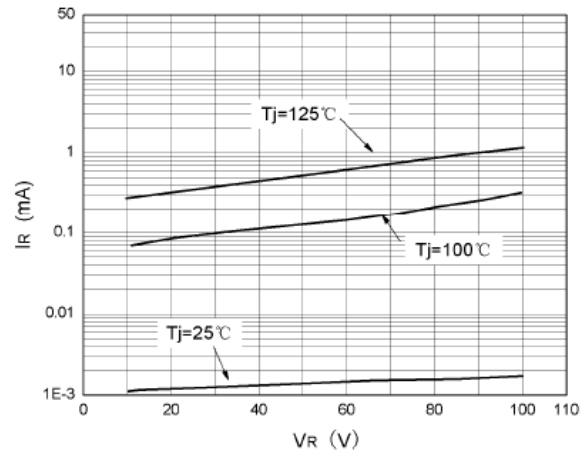


Fig. 4 Reverse leakage current versus reverse voltage applied (typical values,per diode)

