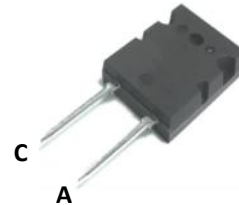


**Fast Recovery 1200V, 75A Diode
 In TO264 Package**
APPLICATIONS

- Switch mode power supplies
- Welding applications
- Motor drives


FEATURES

- Soft recovery characteristics
- Low recovery loss
- Low forward voltage
- High surge current capability
- Low leakage current
- Pb free finished; **RoHS compliant**


MAXIMUM RATINGS

Parameter	Symbol	Value	Units
Repetitive peak reverse voltage	V_{RRM}	1200	V
Continuous forward current $T_C = 100^\circ\text{C}$	I_F	75	A
Maximum repetitive forward current Limited by T_{jmax}	I_{FRM}	150	
Operating junction and storage temperature	T_j, T_{stg}	-40... +150	$^\circ\text{C}$

Thermal Characteristics

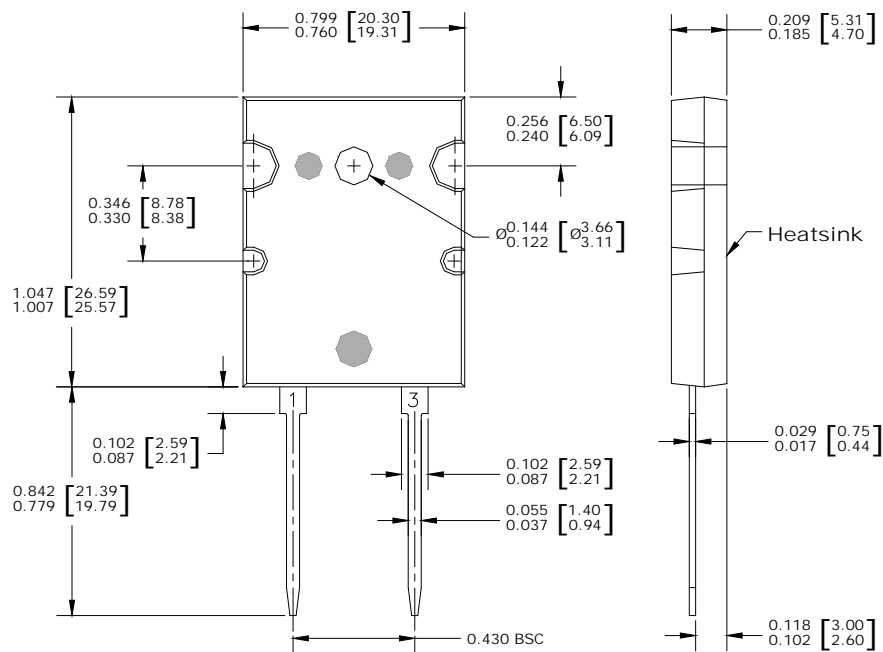
Parameter	Symbol	Max. Value	Units
Characteristics			
Thermal resistance, junction to case	R_{thJC}	0.4	K/W

Electrical Characteristics, at $T_j = 25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Static Characteristics					
Reverse leakage current $V_R = 1200\text{V}$ $V_R = 1200\text{V}, T_j = 125^\circ\text{C}$	I_R	-	- 750	100 -	μA
Forward voltage drop $I_F = 75\text{A}$ $I_F = 75\text{A}, T_j = 125^\circ\text{C}$	V_F	-	1.8 1.85	- -	V

Electrical Characteristics, at $T_j = 25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Dynamic Characteristics					
Reverse recovery time $V_R = 600\text{V}$, $I_F = 75\text{A}$, $di_F/dt = 1600\text{A}/\mu\text{s}$ $T_j = 25^\circ\text{C}$ $T_j = 125^\circ\text{C}$	t_{rr}	- -	250 360	- -	ns
Peak reverse current $V_R = 600\text{V}$, $I_F = 75\text{A}$, $di_F/dt = 1600\text{A}/\mu\text{s}$ $T_j = 25^\circ\text{C}$ $T_j = 125^\circ\text{C}$	I_{rrm}	- -	65 85	- -	A
Reverse recovery charge $V_R = 600\text{V}$, $I_F = 75\text{A}$, $di_F/dt = 1600\text{A}/\mu\text{s}$ $T_j = 25^\circ\text{C}$ $T_j = 125^\circ\text{C}$	Q_{rr}	- -	10 19	- -	μC

Package Outline Drawing

Disclaimer

These specifications may not be considered as a guarantee of components characteristics. Components have to be tested depending on intended application as adjustments may be necessary. The use of **iQXPRZ Power Inc.** components in life support appliances and systems are subject to written approval of **iQXPRZ Power Inc.**