

PRELIMINARY DATASHEET

Fast Recovery 15A, 1200V Diode, in TO247 Package

- Low V_F
- Low I_{RR}
- Soft reverse recovery
- 10 μ s short circuit withstand time
- Pb-free; RoHS compliant



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

Parameter	Symbol	Value	Units
Repetitive peak reverse voltage	V_{RRM}	1200	V
Continuous forward current $T_C = 100^\circ\text{C}$	I_F	15	A
Diode maximum forward current, pulse width limited by T_{jmax}	I_{FM}	80	
Short circuit withstand time	t_{sc}	10	μs
Operating junction and storage temperature	T_j, T_{stg}	-55 ... +150	$^\circ\text{C}$

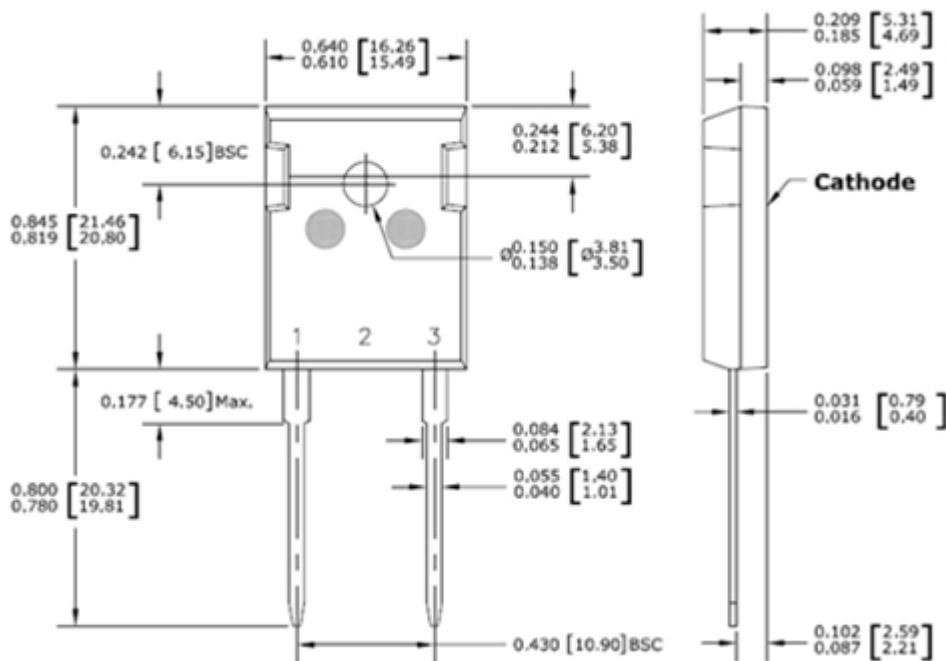
Thermal Characteristics

Parameter	Symbol	Max. Value	Units
Characteristics			
Thermal resistance, junction to case	R_{thJC}	2.24	$^\circ\text{C}/\text{W}$
Thermal resistance, junction to ambient	R_{thJA}	40	

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

Parameter	Conditions	Symbol	Value			Unit
			Min.	Typ.	Max.	
Static Characteristics						
Reverse leakage current	$V_R = 1200 \text{ V}$	I_R	-	-	25	μA
Forward voltage drop $I_F = 15\text{A}$	$I_F = 15\text{A}$	V_F	-	1.7	2.7	V
Dynamic Characteristics						
Reverse recovery time	$I_F = 15\text{A}$ $dI/dt = 200\text{A}/\mu\text{s}$	t_{rr}	-	210	-	V
Reverse recovery charge		Q_{rr}	-	2.8	-	μC
Maximum reverse recovery current		I_{rrm}	-	27	-	A

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.**