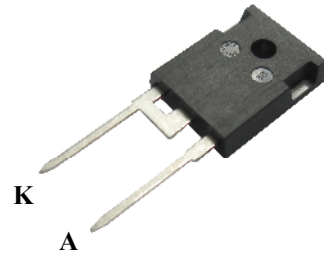
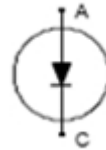


PRELIMINARY DATASHEET
**50A, 600V Rectifier Diodes,
In TO247 B1 version**

- Low forward voltage
- High surge capability
- 150 °C maximum junction temperature
- Pb-free lead finish; RoHS compliant


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

Parameter	Symbol	Value	Units
Repetitive peak reverse voltage	V_{RRM}	1600	V
Continuous forward current $T_c = 90^\circ\text{C}$	I_F	50	A
Maximum surge non-repetitive forward current 10 ms sine pulse, rated V_{RRM} applied 10 ms sine pulse, no voltage reapplied	I_{FSM}	400 475	
Soldering temperature Wave soldering, 1.6 mm (0.063 in.) from case for 10s	T_S	260	$^\circ\text{C}$
Operating junction and storage temperature	T_j, T_{stg}	-40... +150	

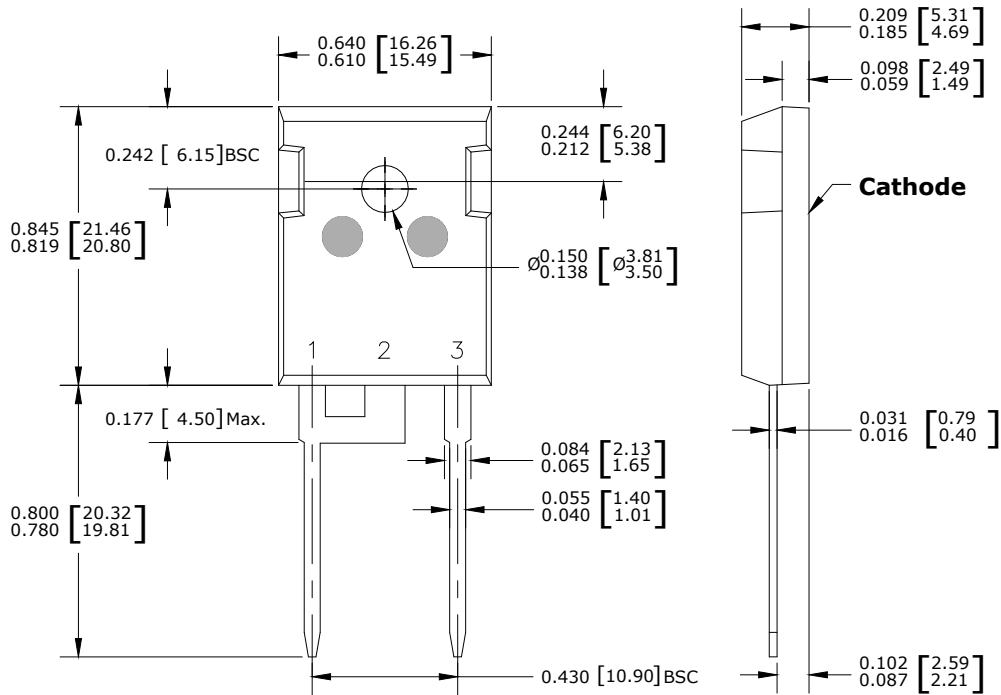
Thermal Characteristics

Parameter	Symbol	Max. Value	Units
Characteristics			
Thermal resistance, junction to case	R_{thJC}	0.6	$^\circ\text{C}/\text{W}$

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

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Static Characteristics					
Reverse leakage current $V_R = 1600\text{V}, T_j = 25^\circ\text{C}$ $V_R = 1600\text{V}, T_j = 150^\circ\text{C}$	I_R	-	-	0.1 1.0	mA
Forward voltage drop $I_{F(AV)} = 50\text{A}, T_j = 25^\circ\text{C}$	V_F	-	1.14	-	V

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.**