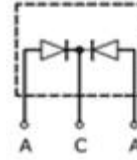
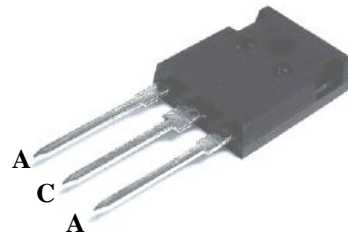


PRELIMINARY DATASHEET
**Parallel (Common Cathode) Fast Recovery
 2X8A, 600V Epitaxial Diodes in TO247
 Package**
APPLICATIONS

- Switch mode power supplies (SMPS) rectifiers
- Uninterruptible power supplies (UPS)
- Ultrasonic cleaners and welders


FEATURES

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


MAXIMUM RATINGS (per Leg), at $T_C = 25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Value	Units
Repetitive peak reverse voltage	V_{RRM}	600	V
Average forward current $T_C = 110^\circ\text{C}$	$I_{F(AV)}$	8	A
Surge non-repetitive forward current $T_J = 45^\circ\text{C}, t_p = 10 \text{ ms}, 50\text{Hz}, \text{Sine}$	I_{FSM}	110	
Power dissipation	P_D	50	W
Operating junction and storage temperature	T_j, T_{stg}	-40... +150	$^\circ\text{C}$

Thermal and Isolation Characteristics

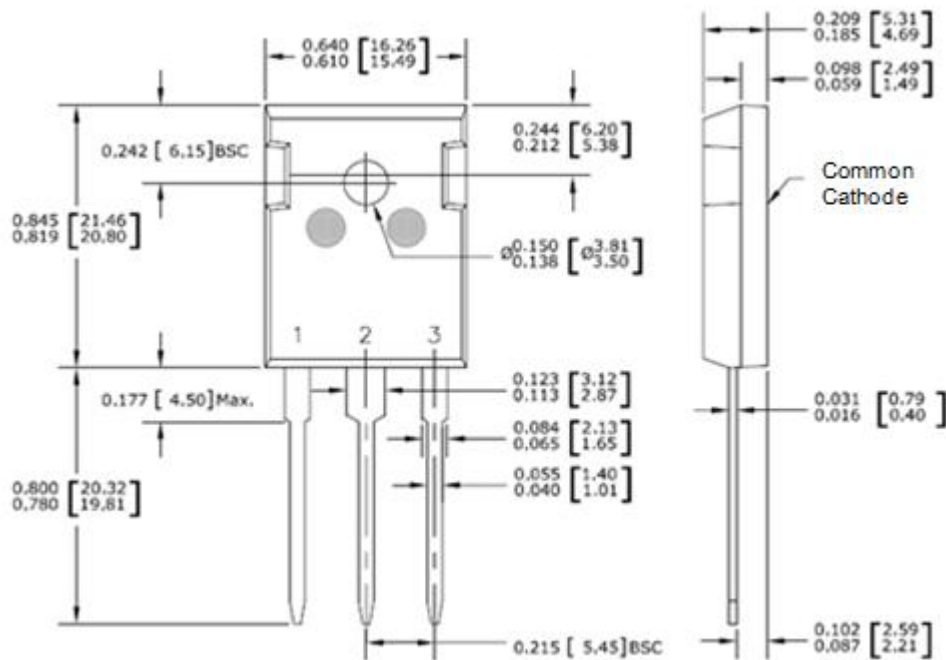
Parameter	Symbol	Max. Value	Units
Characteristics			
Thermal resistance, junction to case, per Leg	R_{thJC}	2.5	$^\circ\text{C}/\text{W}$

Electrical Characteristics (per Leg), at $T_C = 25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Static Characteristics					
Reverse leakage current $V_R = 600\text{V}$ $V_R = 600\text{V}, T_C = 125^\circ\text{C}$	I_R	-	-	15 250	μA
Forward voltage drop $I_F = 8\text{A}$	V_F	-	2.2	2.45	V

Electrical Characteristics (per Leg), at $T_c = 125^\circ\text{C}$

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Dynamic Characteristics					
Reverse recovery time $V_R = 300\text{V}$, $I_F = 8\text{A}$, $di_f/dt = -200\text{A}/\mu\text{s}$	t_{rr}	-	80	-	ns
Reverse recovery charge $V_R = 300\text{V}$, $I_F = 8\text{A}$, $di_f/dt = -200\text{A}/\mu\text{s}$	Q_{rr}	-	166	-	nC
Peak reverse recovery current $V_R = 300\text{V}$, $I_F = 8\text{A}$, $di_f/dt = -200\text{A}/\mu\text{s}$	I_{rrm}	-	4.1	-	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.**