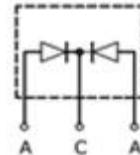


**Parallel (Common Cathode) Fast Recovery  
 2X8A, 600V Epitaxial Diodes in TO247  
 Package**

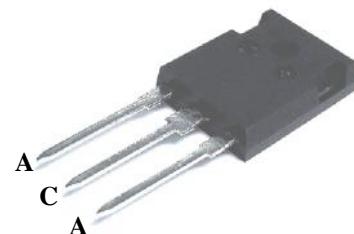
**APPLICATIONS**

- 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 $T_j = 45^\circ\text{C}$ , $t_p = 10 \text{ ms}$ , 50Hz, 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**

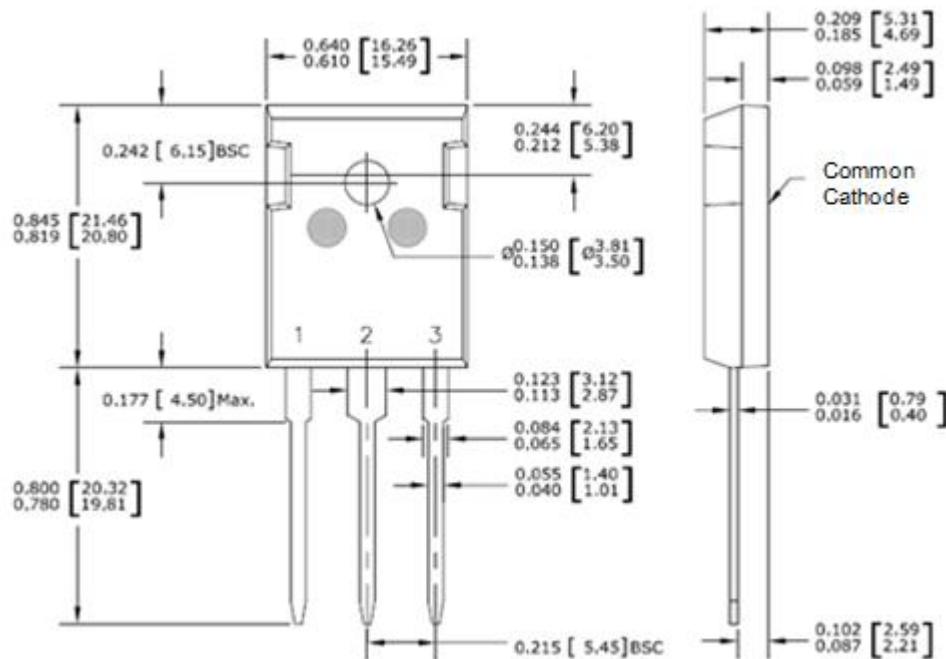
Parameter	Symbol	Max. Value	Units
<b>Characteristics</b>			
Thermal resistance, junction to case, per Leg	$R_{thJC}$	2.5	$^\circ\text{C}/\text{W}$

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

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
<b>Static Characteristics</b>					
Reverse leakage current $V_R = 600\text{V}$	$I_R$	-	-	15 250	$\mu\text{A}$
Forward voltage drop $I_F = 8\text{A}$	$V_F$	-	2.2	2.45	V

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

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
<b>Dynamic Characteristics</b>					
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.**