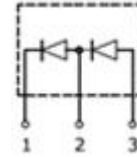


Fast Recovery 2X30A, 600V Diodes, Half-bridge Configuration in TO247 Package

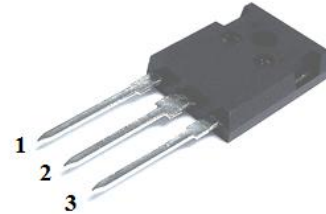
APPLICATIONS

- Switch mode power supplies (SMPS) rectifiers
- Resonant applications
- Industrial drives



FEATURES

- Fast recovery
- Soft switching
- Low reverse recovery charge
- Low forward voltage drop
- Low leakage current
- Pb-free finished; **RoHS compliant**



MAXIMUM RATINGS (per diode)

Parameter	Symbol	Value	Units
Repetitive peak reverse voltage	V_{RRM}	600	V
Continuous forward current $T_C = 85^\circ\text{C}$	I_F	30	A
Maximum repetitive forward current $T_C = 25^\circ\text{C}$, t_p limited by T_{jmax} , $D = 0.5$	I_{FRM}	60	
Operating junction and storage temperature	T_j, T_{stg}	-55... +150	$^\circ\text{C}$

Thermal and Isolation Characteristics

Parameter	Symbol	Max. Value	Units
Characteristics			
Thermal resistance, junction to case, per Diode	R_{thJC}	1.365	$^\circ\text{C}/\text{W}$
Isolation voltage, RMS (measured between terminals and mounting base, 50-60 Hz, for 1-3 seconds)	V_{iso}	3000	V

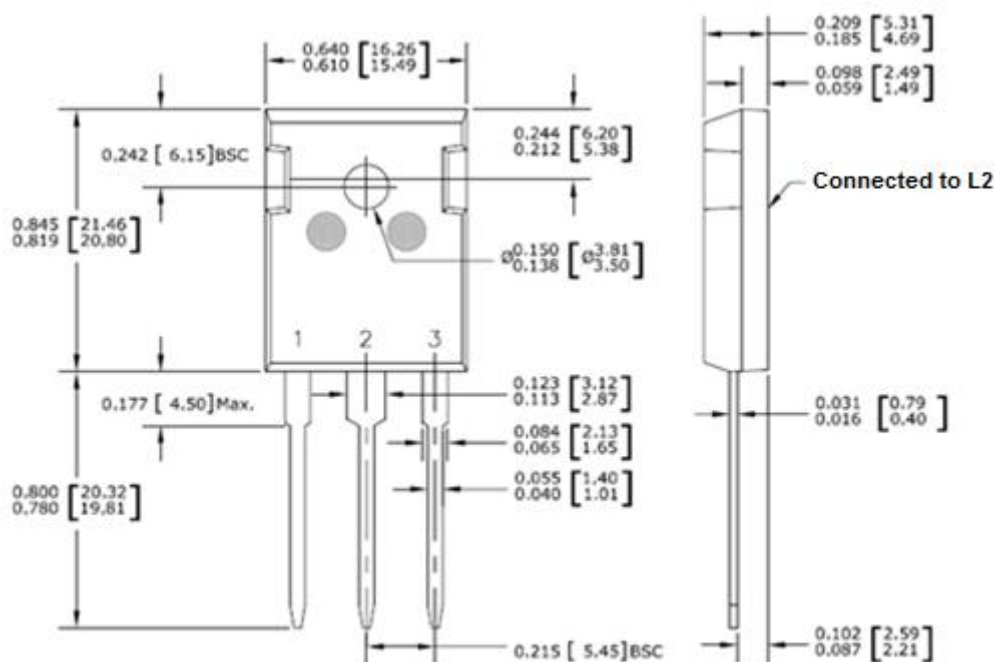
Electrical Characteristics (per diode), at $T_j = 25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Static Characteristics					
Reverse leakage current V _R = 600V, T _j = 25°C	I _R	-	-	50	μA
Forward voltage drop I _F = 30A, T _j = 25°C	V _F	-	1.8	-	V

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

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Dynamic Characteristics					
Diode reverse recovery time $V_R = 400V, I_F = 30A, di_F/dt = 1000A/\mu s, T_j = 25^{\circ}C$	t_{rr}	-	126	-	ns
Peak reverse current $V_R = 400V, I_F = 30A, di_F/dt = 1000A/\mu s, T_j = 25^{\circ}C$	I_{rm}	-	19	-	A
Reverse recovery charge $V_R = 400V, I_F = 30A, di_F/dt = 1000A/\mu s, T_j = 25^{\circ}C$	Q_{rr}	-	1.1	-	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.**