

## Fast Recovery 600V Diode, in TO264 Package

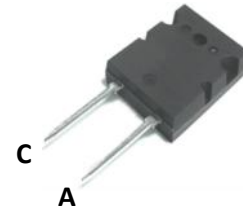
### APPLICATIONS

- 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, 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 $T_c = 25^\circ\text{C}$ $T_c = 90^\circ\text{C}$	$I_F$	32 15	A
Diode pulsed current, $t_p$ limited by $T_{jmax}$	$I_{Fpulse}$	50	
Maximum repetitive forward current $T_c = 25^\circ\text{C}$ , $t_p$ limited by $T_{jmax}$ , $D = 0.5$	$I_{FRM}$	30	
Operating junction and storage temperature	$T_j, T_{stg}$	-55... +175	$^\circ\text{C}$

### Thermal Characteristics

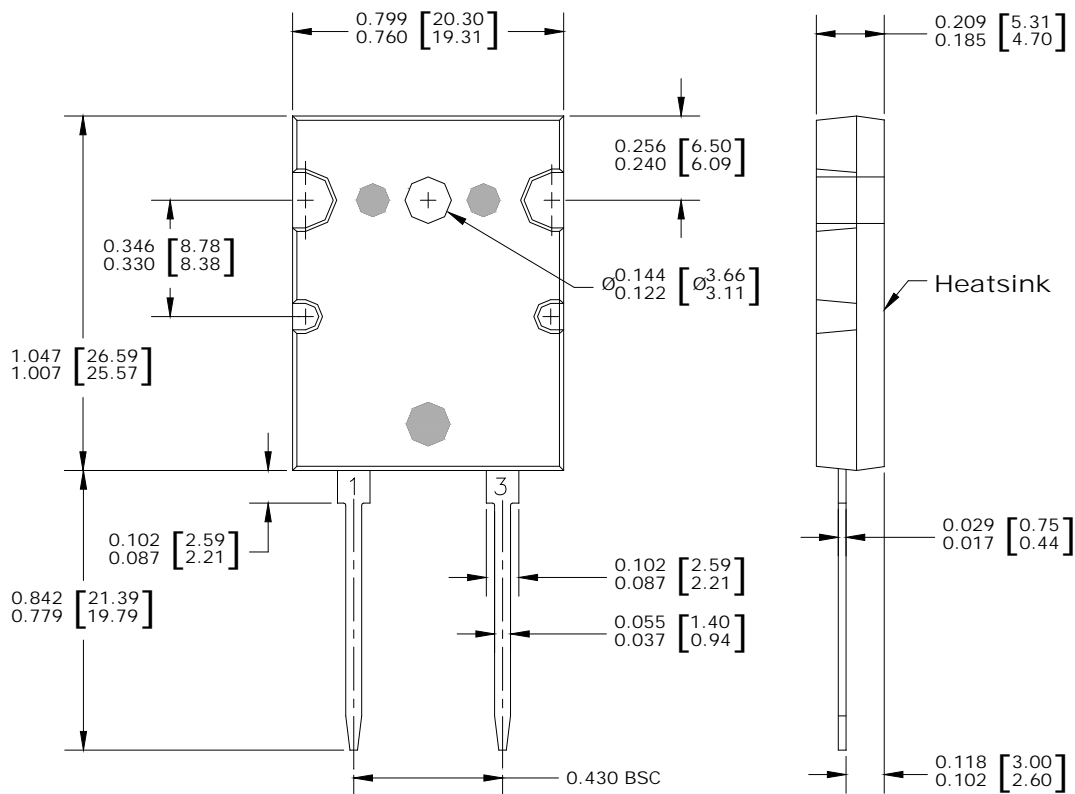
Parameter	Symbol	Max. Value	Units
<b>Characteristics</b>			
Thermal resistance, junction to case	$R_{thJC}$	1.5	K/W

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

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
<b>Static Characteristics</b>					
Reverse leakage current $V_R = 1200\text{V}$	$I_R$	-	-	27	$\mu\text{A}$
Forward voltage drop $I_F = 15\text{A}$ $I_F = 15\text{A}, T_j = 150^\circ\text{C}$	$V_F$	- -	2.0 1.75	2.5 -	V

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

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
<b>Dynamic Characteristics</b>					
Reverse recovery time $V_R = 600\text{V}$ , $I_F = 15\text{A}$ , $di_F/dt = 600\text{A}/\mu\text{s}$ $T_j = 25^\circ\text{C}$ $T_j = 125^\circ\text{C}$	$t_{rr}$	- -	65 200	- -	ns
Peak reverse current $V_R = 600\text{V}$ , $I_F = 15\text{A}$ , $di_F/dt = 600\text{A}/\mu\text{s}$ $T_j = 25^\circ\text{C}$ $T_j = 125^\circ\text{C}$	$I_{rrm}$	- -	15 23	- -	A
Reverse recovery charge $V_R = 600\text{V}$ , $I_F = 15\text{A}$ , $di_F/dt = 600\text{A}/\mu\text{s}$ $T_j = 25^\circ\text{C}$ $T_j = 125^\circ\text{C}$	$Q_{rr}$	- -	0.5 2.0	- -	$\mu\text{C}$

**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.**