



Ruttonsha International Rectifier Ltd.

ULTRA FAST RECOVERY DIODE MODULE

RIRP 200/06F

FEATURES

- * Ultrafast Reverse recovery Time
- * Fully molded package to prevent humidity penetration.
- * Low leakage current and low forward voltage.
- * Surge overload ratings to 1500Amps.
- * Non - Isolated Module

APPLICATIONS

- * Inversion Welder
- * Uninterrupted Power Supply (UPS) .
- * Plating Power Supply.
- * Ultasonic Cleaner and Welder.
- * Conveter and Chopper.
- * Power factor Correction (PFC) Circuit.

MAJOR RATINGS & CHARACTERISTICS

Parameters	RIRI 200...F	Units
$I_{F(AV)}$ @ $T_c = 100^{\circ}\text{C}$ (Per Module)	200	A
I_{FSM} $T_c = 25^{\circ}\text{C}$	1500	A
V_{BRM} range	UP TO 600	V
T_j	-40 to 150	$^{\circ}\text{C}$

ULTRA FAST RECOVERY DIODE MUDULE

RIRP 200/06F

ELECTRICAL SPECIFICATION

VOLTAGE RATINGS

Type Number	Voltage Code	V_{RRM} , max. repetitive peak reverse and off-state voltage blocking voltage V	V_{RSM} , max. non-repetitive peak reverse voltage V	I_{RRM} max. @ μ A	
				25°C	125°C
RIRP 200...F	06	600	700	5	500

FORWARD CONDUCTION

	Parameters	RIRP 200...F		Units	Conditions
$I_{F(DC)}$	Continuous Forward Current per Module	200		A	$T_c = 25^{\circ}C$
I_{FSM}	Non-repetitive surge forward current	1500		A	50Hz, 10mS.
V_{FM}	Max. forward voltage drop	Typ. 1.1 1.3	Max. 1.4 1.6	V	$T_c = 25^{\circ}C$ $IF = 100A,$ $IF = 200A,$
trr	Reverse recovery time	50		ns	$IF = 1A, 200 A/\mu$ s, $V_R = 30V, T_J = 25^{\circ}C$

THERMAL AND MECHANICAL SPECIFICATIONS

	Parameters	RIRP 200...F		Units	Conditions
T_J	Junction operating temperature	-40 to 150		$^{\circ}C$	
T_{stg}	Storage temperature range	-40 to 125		$^{\circ}C$	
R_{thj-c}	Max. internal thermal resistance, junction to case Per Diode Per Module	0.20 0.095		$^{\circ}C/W$	
T	Mounting torque	3 - 4.7		Nm	
Wt	Approximate weight	70		g	

ULTRA FAST RECOVERY DIODE MUDULE

RIRP 200/06F

OUTLINE DIAGRAM

