

FRED Modules

V_{RRM} 1200V

I_{FAV} 200 A

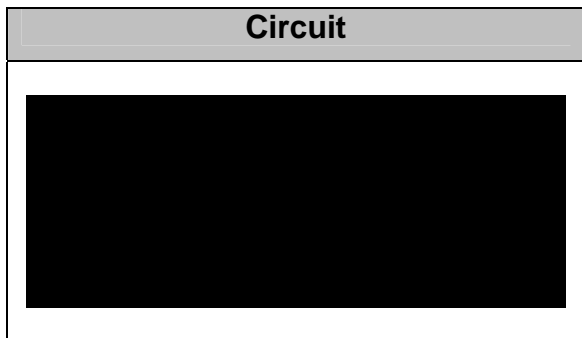
Applications

Inversion Welder
 Uninterruptible Power Supply (UPS)
 Plating Power Supply
 Ultrasonic Cleaner and Welder
 Power Factor Correction (PFC) Circuit
 Converter & Chopper

Features

Soft Reverse Recovery Characteristics
 Ultrafast Reverse Recovery Time
 Low Reverse Recovery Loss
 Low Forward Voltage
 High Surge Current Capability
 Low Inductance Package

Circuit



Maximum Ratings

Symbol	Conditions	Values	Units
V_R		1200	V
V_{RRM}		1200	V
$I_{F(AV)}$	$T_C=110^{\circ}\text{C}$, Per Diode	200	A
$I_{F(RMS)}$	$T_C=110^{\circ}\text{C}$, Per Diode	280	A
I_{FSM}	1/2 Cycle, 50Hz, Sine	1800	A
	1/2 Cycle, 60Hz, Sine	1950	A
I^2t	$T_J=45^{\circ}\text{C}$, $t=10\text{ms}$, 50Hz, Sine	16200	A^2s
	$T_J=45^{\circ}\text{C}$, $t=8.3\text{ms}$, 60Hz, Sine	19000	A^2s
P_D		568	W
Visol	AC, $T_{on}=1\text{min}$	3000	V
T_J		-40 to +150	$^{\circ}\text{C}$
T_{STG}		-40 to +125	$^{\circ}\text{C}$
Torque	Recommended M6	4.5	N·m
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			hfs
$R_{th(j-c)}$	Junction-to-Case	0.2	/W

