

FRD MODULE 50A/600V/trr:100nsec

PD50F6

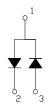
OUTLINE DRAWING

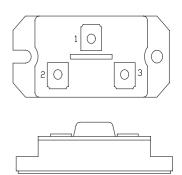
FEATURES

- * Isolated Base
- * Dual Diode Doubler Circuit
- * Ultra Fast Recovery
- * High Surge Capability
- * UL Recognized, File No. E187184

TYPICAL APPLICATIONS

* High Frequency Rectification





Maximum Ratings

Approx Net Weight:105g

Voltage Rating	Symbol	PD50F6		Unit
Repetitive Peak Reverse Voltage per Arm	Vrrm	500		V
Electrical Rating		Condition	Rating	
Average Rectified Output Current	Io	50Hz Half Sine Wave condition per Arm Tc=89°C	50	A
RMS Forward Current	I _{F(RMS)}	per Arm	78	Α
Surge Forward Current	LCM.	50 Hz Half Sine Wave,1cycle Non-repetitive per Arm	800	A
I Squared t	I2t	2 msec to 10 msec per Arm	3200	A^2s
Operating JunctionTemperature Range	Tjw		-40 to +150	°C
Storage Temperature Range	Tstg		-40 to +125	°C
Isoration Voltage	Viso	Base Plate to Terminal, AC1min	2000	V
Mounting torque	Ftor	Case mounting(recommended)	2.6	N•m
		Terminal Screw(recommended)	1.4	

Electrical • Thermal Characteristics

Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Forward Voltage	$V_{\rm FM}$	I _{FM} = 50A, Tj=25°C, per Arm	1.50	V
Peak Reverse Current	I_{RM}	V _{RM} = V _{RRM} , Tj= 150°C, per Arm	10	mA
Reverse Recovery Time	Trr	I_{FM} = 10A, -di/dt= 50 A/ μ s, Ta= 25°C Per Arm	100	ns
Thermal Resistance	Rth(j-c)	Junction to Case per Arm	0.8	
		Base Plate to Heat Sink with Thermal Compound	0.1	°C/W
Internal Lead Inductance	Ls	Anode Terminal to Cathode Terminal Per Element	30	nН

Nihon Inter Electronics Corporation

PD50F6 OUTLINE DRAWING (Dimensions in mm)

