

# FRD MODULE 270A/600V/trr:170nsec

# PH270F6

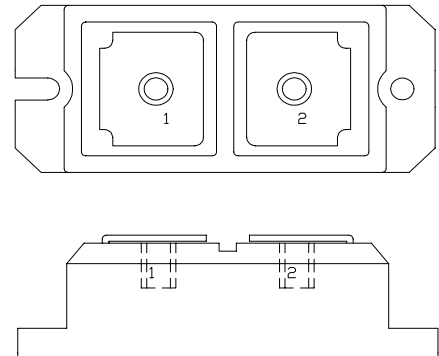
## OUTLINE DRAWING

### FEATURES

- \* Isolated Base
- \* Ultra Fast Recovery
- \* High Surge Capability
- \* UL Recognized, File No. E187184

### TYPICAL APPLICATIONS

- \* High Frequency Rectification



### Maximum Ratings

Approx Net Weight:280g

Voltage Rating	Symbol	PH270F6		Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	600		V
Electrical Rating		Condition	Rating	
Average Rectified Output Current	$I_o$	50Hz Half Sine Wave $T_c=82^\circ\text{C}$	270	A
RMS Forward Current	$I_{F(RMS)}$		424	A
Surge Forward Current	$I_{FSM}$	50 Hz Half Sine Wave,1cycle Non-repetitive	3000	A
I Squared t	$I^2t$	2msec to 10msec	45000	$\text{A}^2\text{s}$
Operating Junction Temperature Range	$T_{jw}$		-40 to +150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$		-40 to +125	$^\circ\text{C}$
Isolation Voltage	Viso	Base Plate to Terminal, AC1min	2000	V
Mounting torque	Ftor	Case mounting(recommended)	2.6	N.m
		Terminal Screw(recommended)	9.0	

### Electrical • Thermal Characteristics

Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Forward Voltage	$V_{FM}$	$I_{FM}= 270\text{A}$ , $T_j=25^\circ\text{C}$	1.50	V
Peak Reverse Current	$I_{RM}$	$V_{RM}= V_{RRM}$ , $T_j= 150^\circ\text{C}$	20	mA
Reverse Recovery Time	trr	$I_{FM}= 10\text{A}$ , $-di/dt= 50 \text{ A}/\mu\text{s}$ , $T_a= 25^\circ\text{C}$	150	ns
Thermal Resistance	Rth(j-c)	Junction to Case	0.17	$^\circ\text{C}/\text{W}$
	Rth(c-f)	Base Plate to Heat Sink with Thermal Compound	0.06	

PH270F6 OUTLINE DRAWING (Dimensions in mm)

