

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

PH270F6

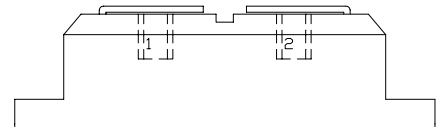
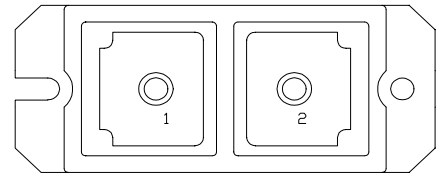
OUTLINE DRAWING

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	A^2s
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	V_{iso}	Base Plate to Terminal, AC1min	2000	V
Mounting torque	F_{tor}	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	$R_{th(j-c)}$	Junction to Case	0.17	$^{\circ}\text{C}/\text{W}$
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound	0.06	

PH270F6 OUTLINE DRAWING (Dimensions in mm)

