

# 6Ri75P-160

## Diode Module

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1600V / 75A

#### ■ Features

- Compact Package
- P.C. Board Mount Module
- Converter Diode Bridge

#### ■ Applications

- Inverter for Motor Drive
- AC and DC Servo Drive Amplifier
- Uninterruptible Power Supply

#### ■ Maximum ratings and characteristics

##### ● Absolute maximum ratings (Tc=25°C unless without specified)

Item	Symbol	Condition	Rating	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>		1600	V
Non-repetitive peak reverse voltage	V <sub>RSM</sub>		1760	V
Average output current	I <sub>o</sub>	50Hz/60Hz sine wave T <sub>c</sub> =97°C	75	A
One cycle surge current	I <sub>FSM</sub>	From rated load	600	A
I <sub>t</sub>	I <sub>t</sub>	From rated load	1440	A <sup>2</sup> s
Operation junction temperature	T <sub>j</sub>		-40 to +125	°C
Storage junction temperature	T <sub>stg</sub>		-40 to +125	°C
Isolation voltage	V <sub>iso</sub>	AC : 1 minute	3000	V
Mounting screw torque		M5 screw	2.0 to 2.5	N·m

##### ● Electrical characteristics (T<sub>j</sub>=25°C unless otherwise specified)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward voltage	V <sub>FM</sub>	T <sub>j</sub> =25°C, I <sub>FM</sub> =75A			1.35	V
Reverse current	I <sub>RRM</sub>	T <sub>j</sub> =150°C, V <sub>R</sub> =V <sub>RRM</sub>			15	mA

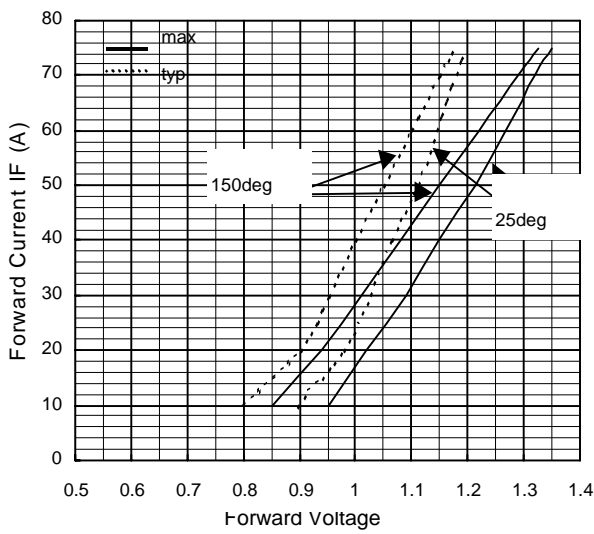
##### ● Thermal characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Thermal resistance	R <sub>th(j-c)</sub>	Per total loss			0.16	°C/W
		Per each device			0.96	
Thermal Resistance(Case to fine)	R <sub>th(c-f)</sub>	with thermal compound			0.08	°C/W

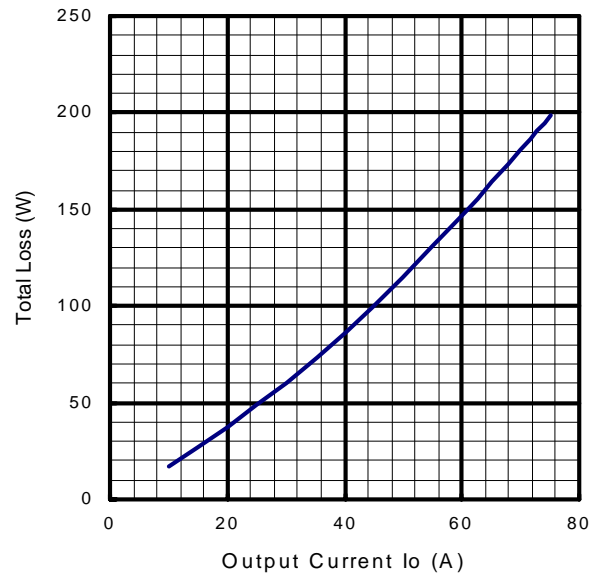
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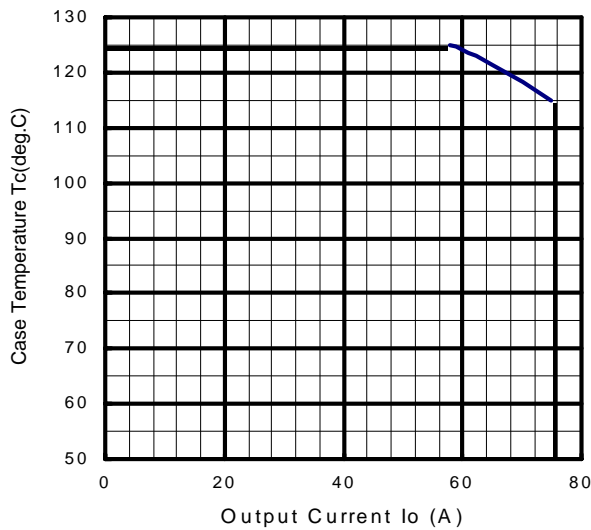
Forward Characteristics



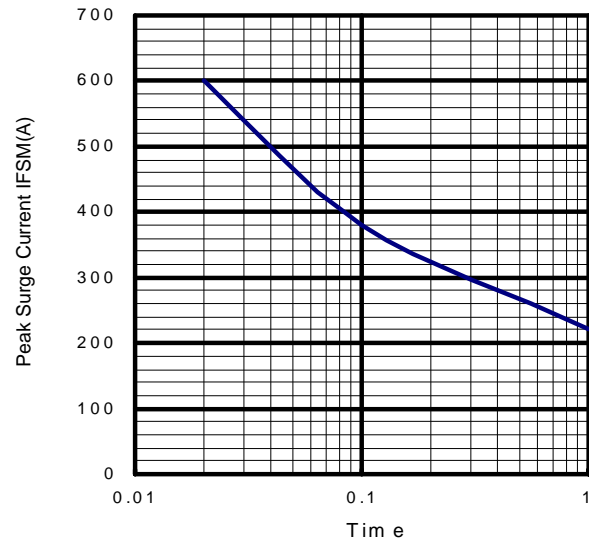
Output Current - Total Loss



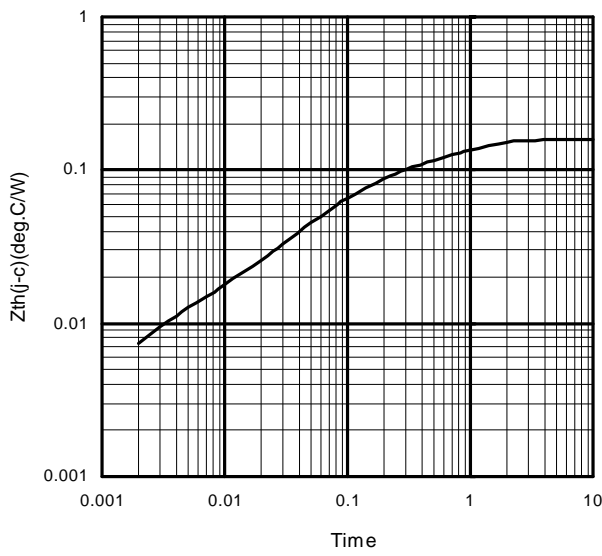
Output Current - Case Temperature



Surge Current



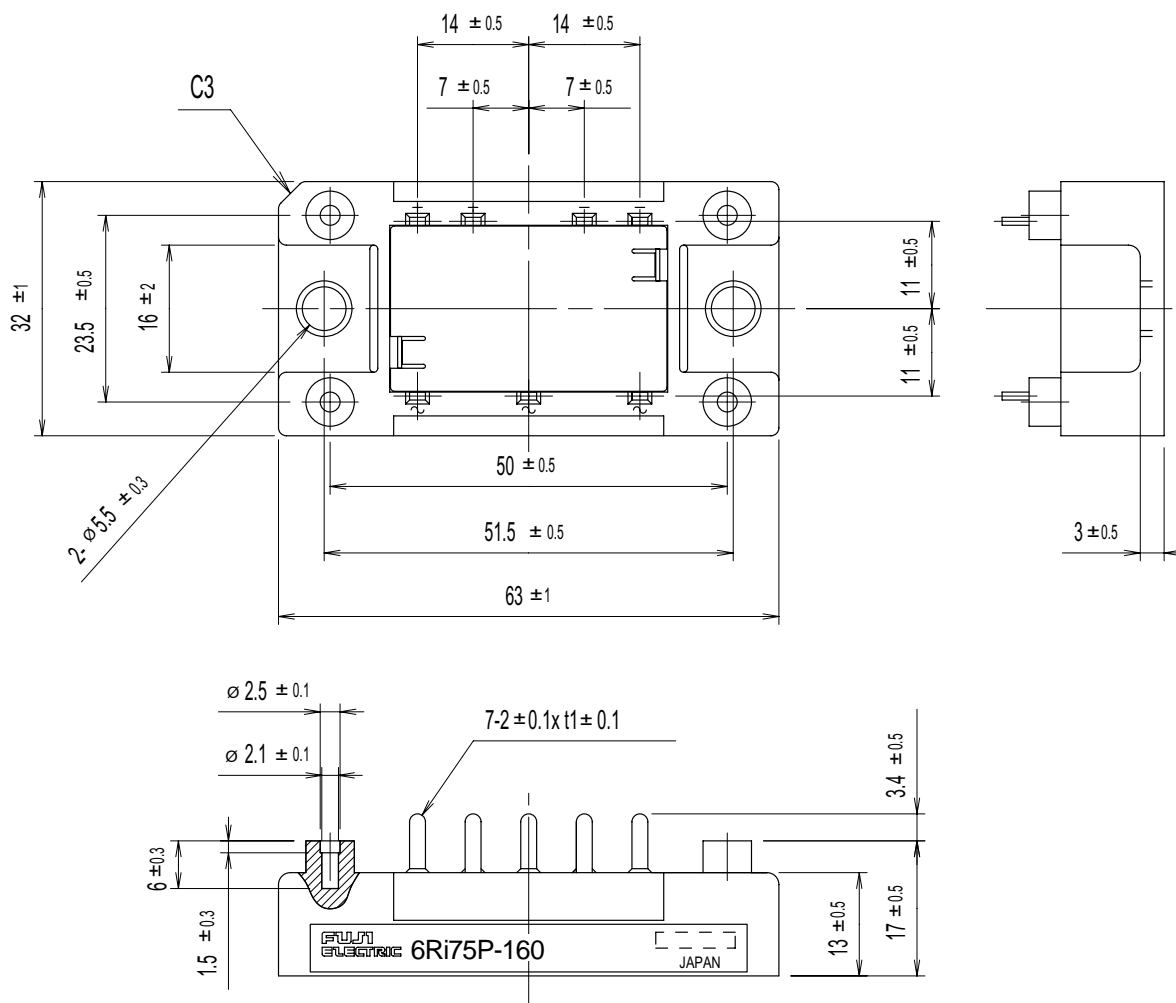
Transient Thermal Impedance



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## Outline Drawings, mm



## Equivalent Circuit Schematic

