

Diode Module

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_{RRM}		1600	V
Non-repetitive peak reverse voltage	V_{RSM}		1760	V
Average output current	I_o	50Hz/60Hz sine wave Tc=97°C	75	A
One cycle surge current	I_{FSM}	From rated load	600	A
P_t	P_t	From rated load	1440	A ² s
Operation junction temperature	T_j		-40 to +125	°C
Storage junction temperature	T_{slg}		-40 to +125	°C
Isolation voltage	V_{iso}	AC : 1 minute	3000	V
Mounting screw torque		M5 screw	2.0 to 2.5	N·m

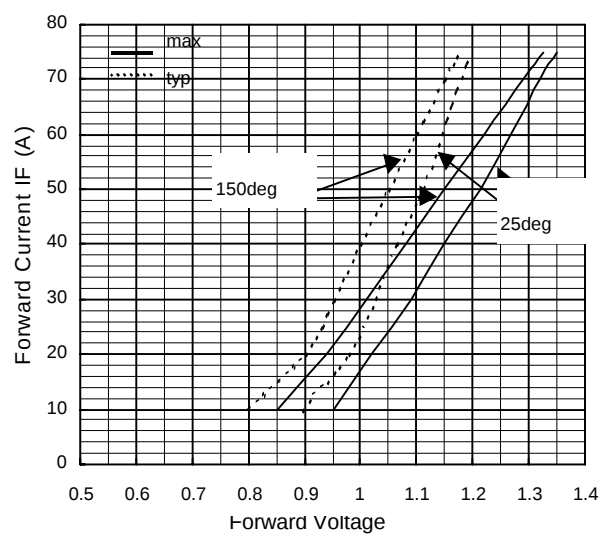
● Electrical characteristics (Tj=25°C unless otherwise specified)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Fofward voltage	V_{FM}	Tj=25°C, I_{FM} =75A			1.35	V
Reverse current	I_{RRM}	Tj=150°C, V_R = V_{RRM}			15	mA

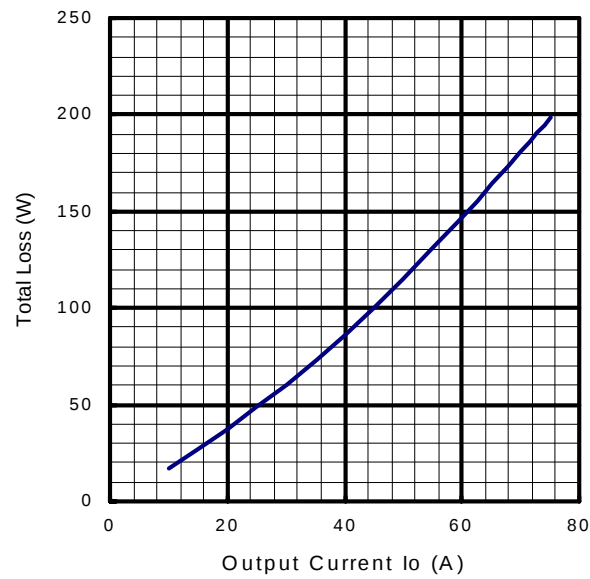
● Thermal characteristics

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

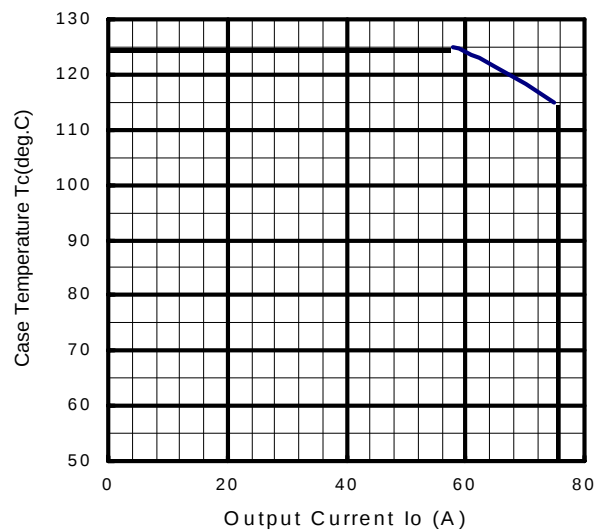
Forward Characteristics



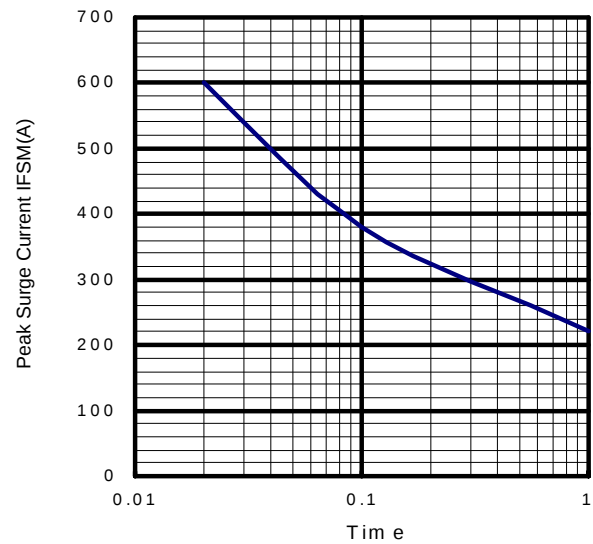
Output Current - Total Loss



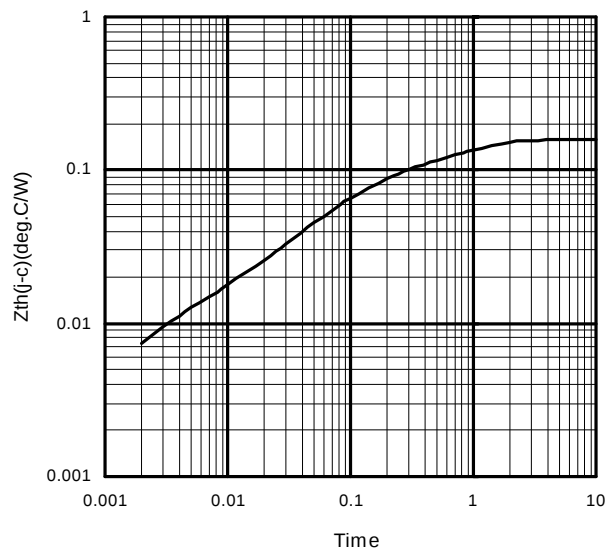
Output Current - Case Temperature



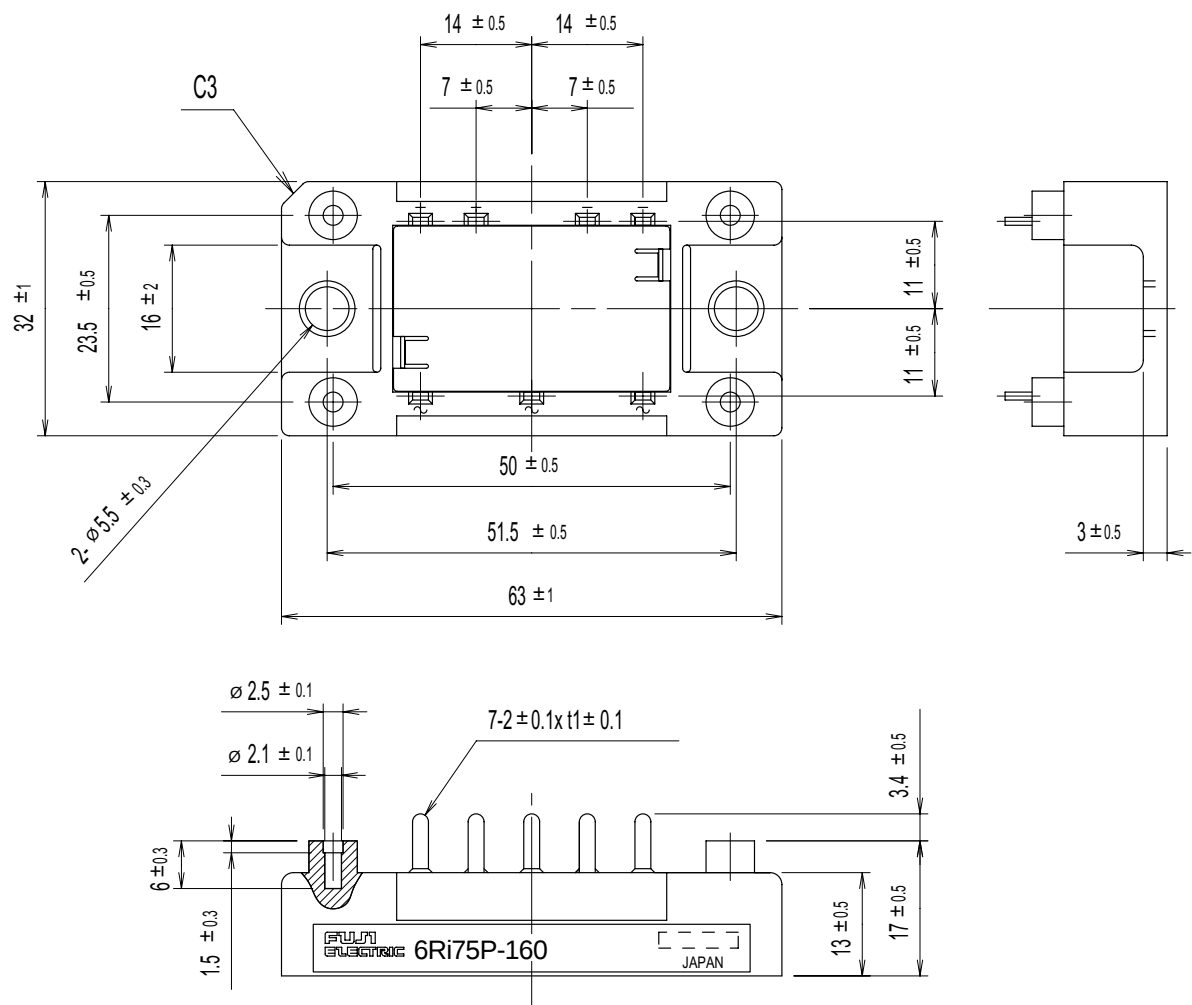
Surge C current



Transient Thermal Impedance



■ Outline Drawings, mm



■ Equivalent Circuit Schematic

