Rating and characteristics diode module(tentative)

Type Name : 6Ri125P-160

1. Maximum ratings

	Item	Symbol	Condition	Ratings	Unit
Voltage	Repetitive peak reverse voltage	V_{RRM}		1600	V
	Non-repetitive peak reverse voltage	V_{RSM}		1760	V
Current	Average output current	Io	50/60Hz sine wave Tc=103℃	125	A
	Surge forward current	I_{FSM}	From rated load	1200	A
	I^2t	I^2t	From rated load	6000	A^2s
Temp.	Operation junction temperature	Tj		-40 to +150	℃
	Storage junction temperature	Tstg		-40 to +125	℃
Isolation voltage		Viso	AC : 1min.	3000	V
Mounting screw torque			M5 screw	2.0 ~ 2.5	N·m

2. Electrical characteristics

Item	Symbol	Condition	min.	typ.	max.	Unit
Forward voltage	V_{FM}	Tj=25℃, IFM=125A			1.35	V
Reverse current	I_{RRM}	Tj=150℃, VR=VRRM			10.0	mA

3. Thermal characteristics

Item	Symbol	Condition		min.	typ.	max.	Unit
Thermal resistance (junction to case)	Rth(j-c)	50/60Hz sine wave	Per total loss			0.13	℃/W
			Per 1 device			0.73	
Thermal resistance (case to fin)	Rth(c-f)	with thermal compound				0.08	℃/W

4. Outline drawing and equivalent circuit is shown in page 2/4.

5. Electrical characteristics curves are shown in page 3/4 and 4/4.

	DATE	NAME	APPROVED
DRAWN	Jul -29-'03	H. Hameda	
CHECKED	July -29-'03	S. Mitta	T. Miyasaka
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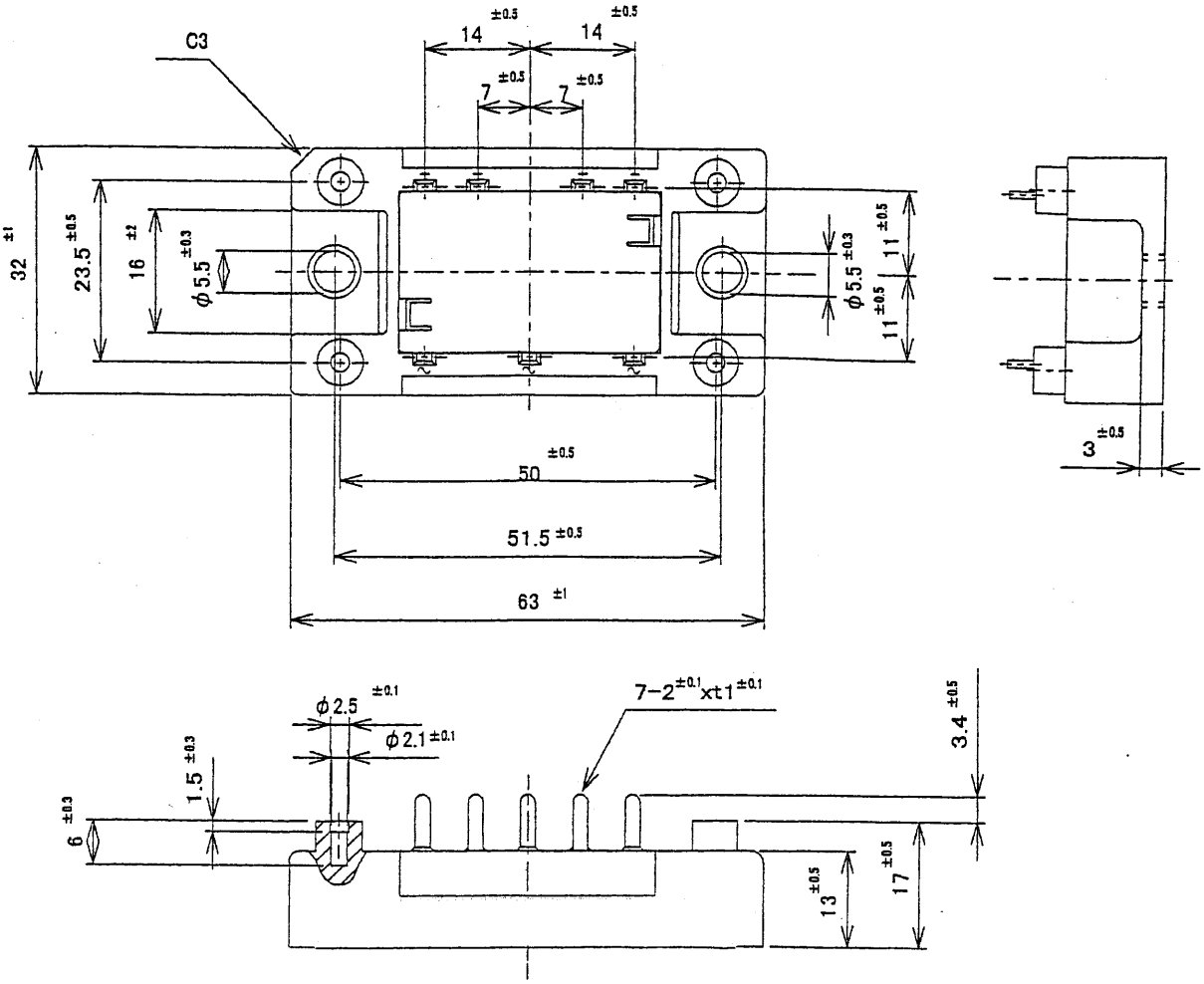
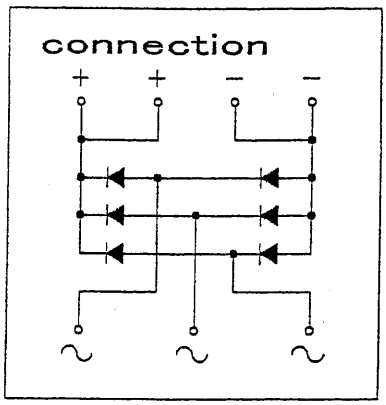


dimensin in mm



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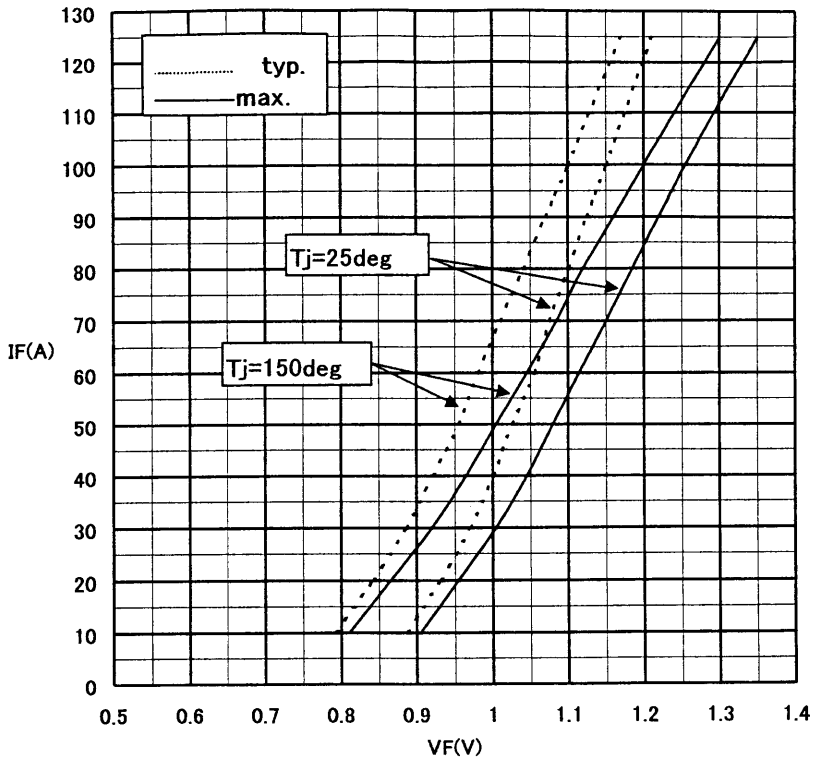
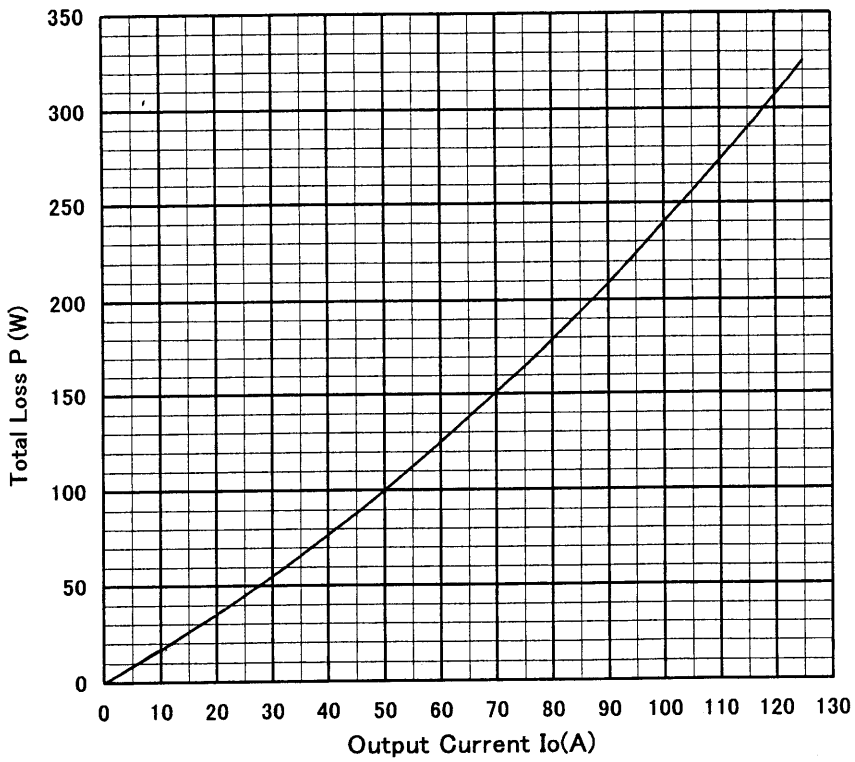
Forward characteristics



Output Current vs Total Loss



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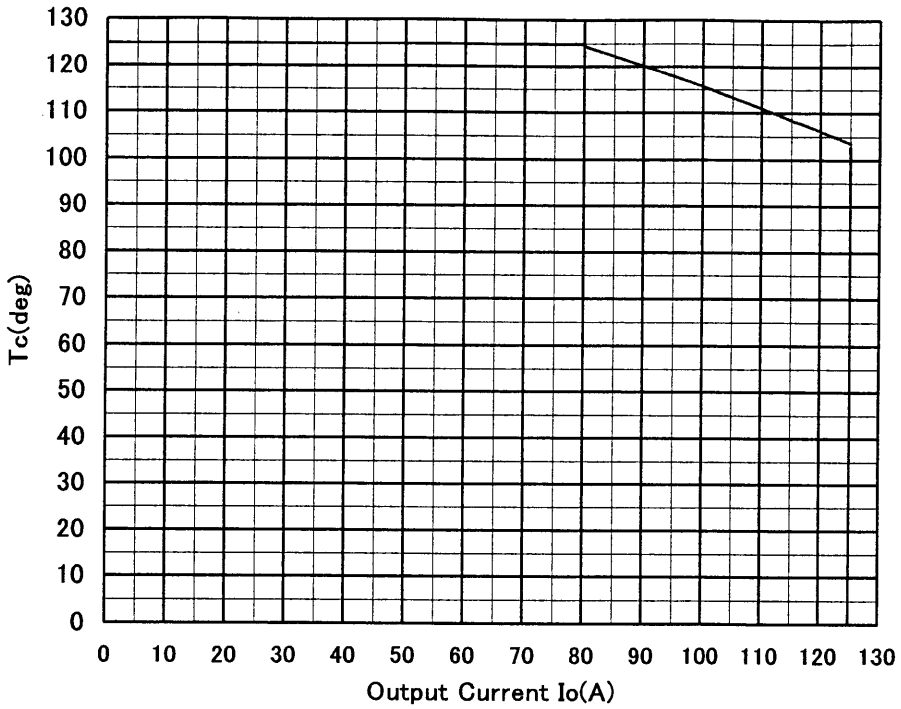
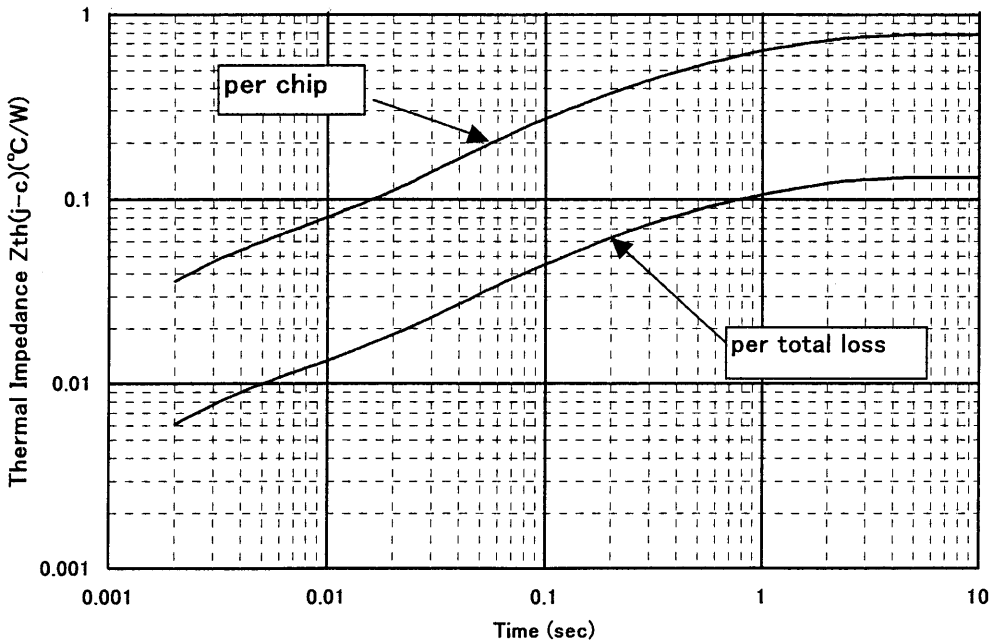
Output Current vs. Tc



Transient Thermal Impedance(Junction to Case)



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