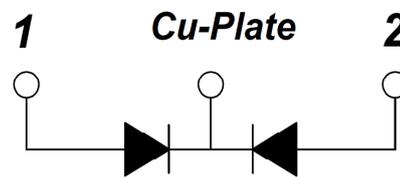## PRODUCT FEATURES

- Ultrafast Recovery Time
- Low Recovery Loss
- Low Forward Voltage
- Low Leakage Current
- Low Inductance Package

APPLICATIONS

- Inversion Welder
- Uninterruptible Power Supply
- Plating Power Supply
- Ultrasonic Cleaner and Welder
- Converter & Chopper
- PFC

ABSOLUTE MAXIMUM RATINGS　　　　T_C=25℃ unless otherwise specified

Symbol	Parameter/Test Conditions		Values	Unit
V_R	Maximum D.C. Reverse Voltage		400	V
V_{RRM}	Maximum Repetitive Reverse Voltage			
$I_{F(AV)}$	Average Forward Current	T_C=110°C, Per Diode	100	A
		T_C=110°C, Per Moudle	200	
$I_{F(RMS)}$	RMS Forward Current	T_C=110℃, Per Diode	150	
I_{FSM}	Non Repetitive Surge Forward Current	T_J=45℃,t=10ms,Sine,peak value	1200	
		T_J=45℃,t=8.3ms,Sine,peak value	1310	
I^2t	For Fusing	T_J=45℃,t=10ms,Sine,peak value	7200	A^2S
		T_J=45℃,t=8.3ms,Sine,peak value	7122	
P_D	Power Dissipation		625	W
T_J	Junction Temperature		-40 to +150	℃
T_{STG}	Storage Temperature Range		-40 to +125	℃
Torque	Module to Sink	Recommended（M6）	3～4.7	Nm
Torque	Module Electrodes	Recommended（M6）	3～4.7	Nm
R_{thJC}	Junction to Case Thermal Resistance(Per Diode)		0.2	℃ /W
Weight			92	g

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

| Symbol	Parameter/Test Conditions		Min.	Typ.	Max.	Unit
I_{RM}	Maximum Reverse Leakage Current	V_R = 400V			0.5	mA
		V_R = 400V, T_J = 125℃			10	
V_F	Forward Voltage	I_F=100A		1.5	2.0	V
		I_F=100A,T_J=125℃		1.2		
trr	Reverse Recovery Time (I_F = 1A, dI_F/dt = -200A/μs, V_R = 30V)			35		ns
trr	Reverse Recovery Time	I_F=100A,V_R =200V,		60		ns
I_{RRM}	Maximum Reverse Recovery Current	dI_F/dt = -200A/μs		9		A
trr	Reverse Recovery Time	I_F= 100A,V_R = 200V,		85		ns
I_{RRM}	Maximum Reverse Recovery Current	dI_F/dt = -200A/μs ,T_J=125℃		15		A
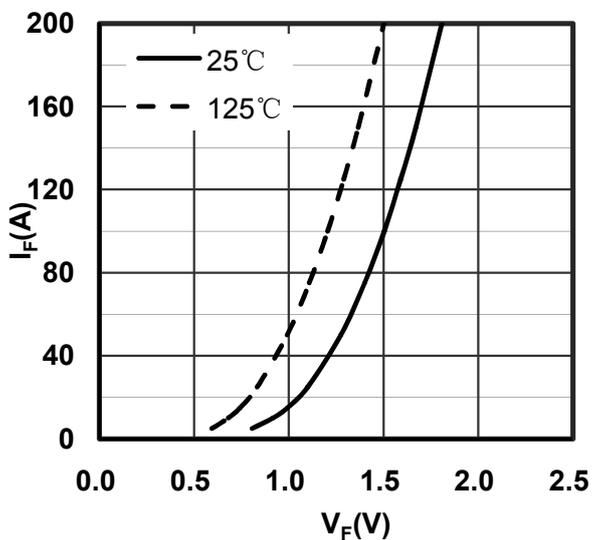
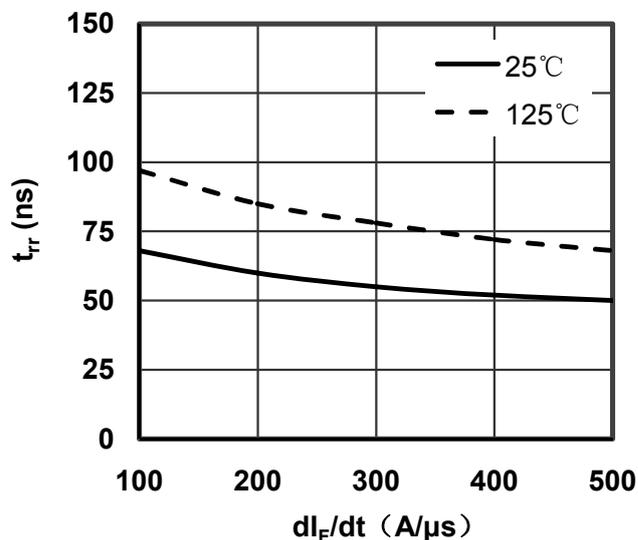Figure 1. Forward Voltage Drop vs Forward Current

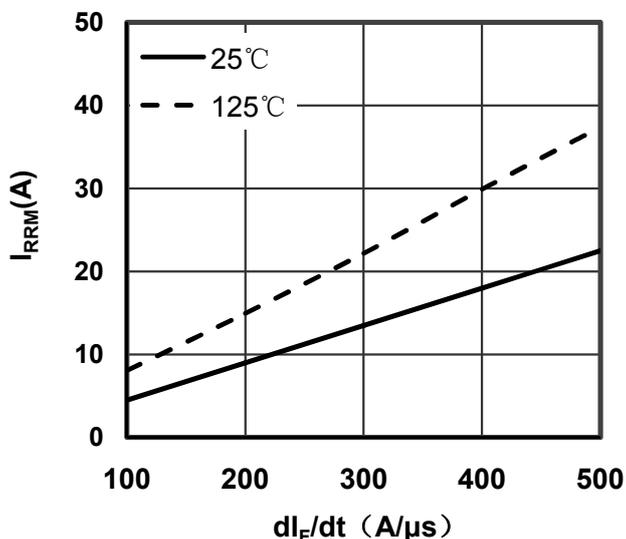Figure 2. Reverse Recovery Time vs dI_F/dt

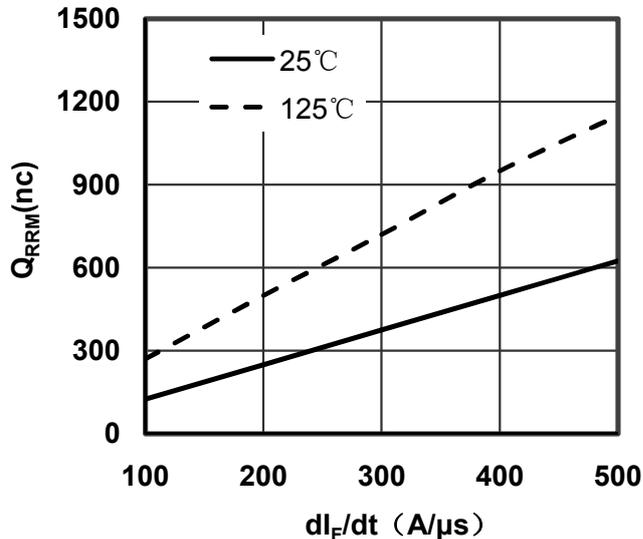Figure 3. Reverse Recovery Current vs dI_F/dt

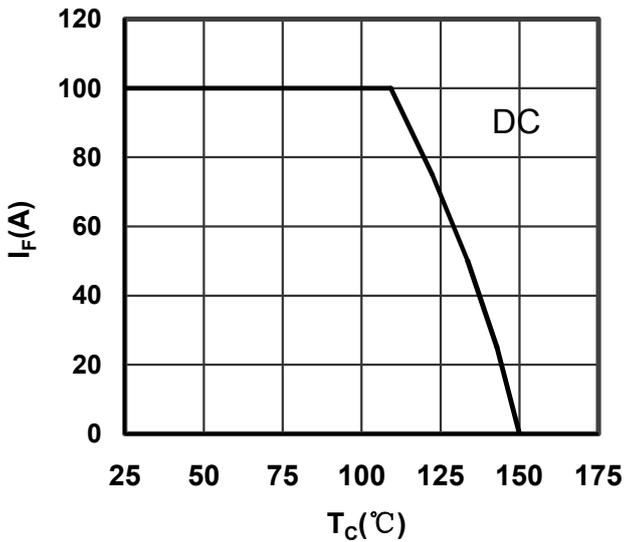Figure 4. Reverse Recovery Charge vs dI_F/dt

Figure 5.Forward current vs Case temperature

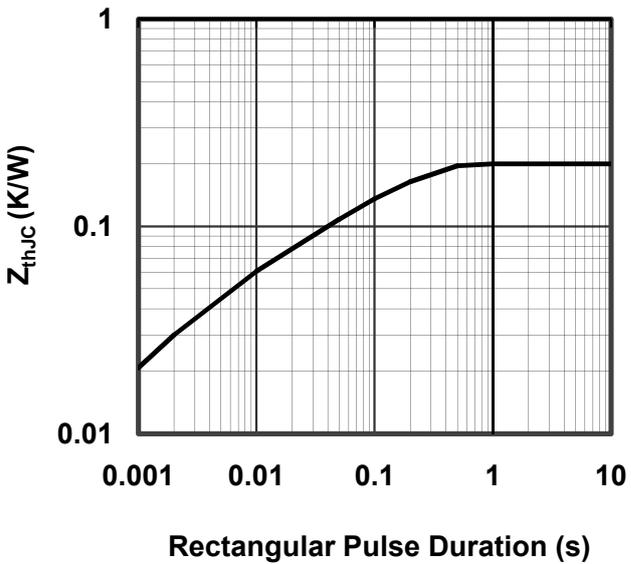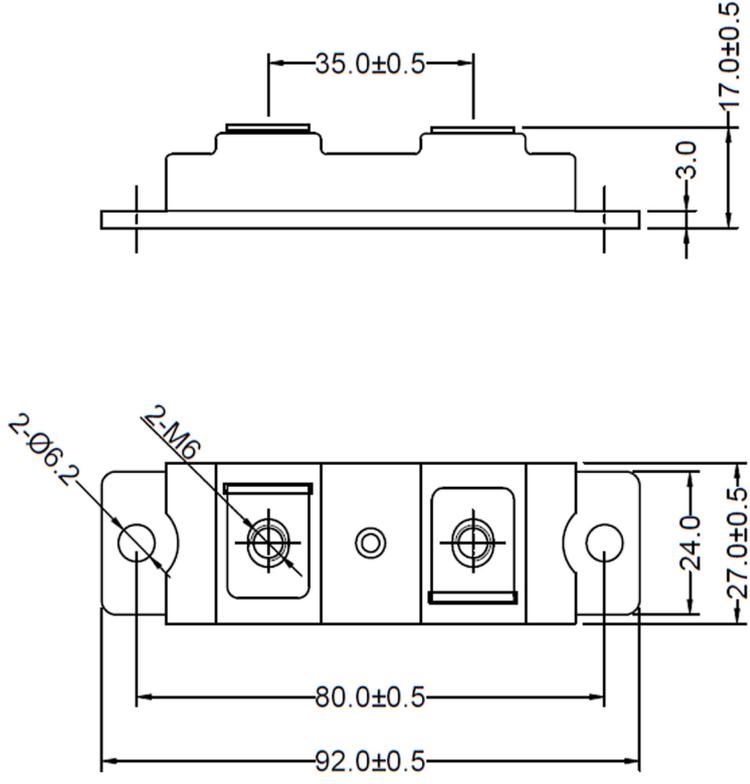Figure 6. Transient Thermal Impedance

Dimensions in (mm)
Figure 7. Package Outline