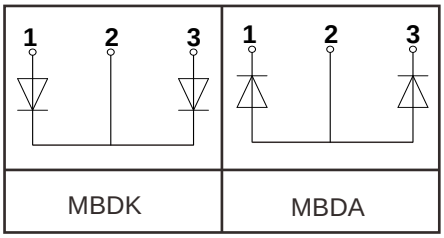
SHI LING®

ZHEJIANG SHILING SEMICONDUCTOR CO.,LTD.

PRODUCT FEATURES

- Ultrafast Reverse Recovery Time
- Soft Reverse Recovery Characteristics
- Low Reverse Recovery Loss
- Low Forward Voltage
- High Surge Current Capability
- Low Inductance Package



APPLICATION S

- Inversion Welder
- Uninterruptible Power Supply (UPS)
- Plating Power Supply
- Ultrasonic Cleaner and Welder
- Converter & Chopper
- Power Factor Correction (PFC) Circuit

ABSOLUTE MAXIMUM RATINGS

Tc=25 unless otherwise specified

Symbol	Parameter	Test Conditions	Values	Unit
V_R	Maximum D.C. Reverse Voltage		100	V
V_{RRM}	Maximum Repetitive Reverse Voltage		100	V
$I_{F(AV)}$	Average Forward Current	T_C=100 , Per Diode	200	A
		T_C=100 , Per Moudle	400	A
		T_C=100 , 20KHz, Per Moudle	280	A
$I_{F(RMS)}$	RMS Forward Current	T_C=100 , Per Diode	280	A
I_{FSM}	Non-Repetitive Surge Forward Current	1/2 Cycle , 60Hz, Sine	2000	A
I^2t	I^2t (For Fusing)	T_J=45 , t=8.3ms, 60Hz, Sine	20000	A^2s
V_{iso}	Insulation Test Voltage	AC, t=1min , I_{iso} 1mA	2500	V
P_D	Power Dissipation		525	W
T_J	Junction Temperature		-40 to +150	
T_{STG}	Storage Temperature Range		-40 to +125	
Torque	Module-to-Sink	Recommended M6	3 5	N.m
Torque	Module Electrodes	Recommended M6	3 5	N.m
$R_{\theta JC}$	Thermal Resistance	Junction-to-Case	0.20	/W
Weight			100	g

ELECTRICAL CHARACTERISTICS

T_C=25 unless otherwise specified

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{RM}	Reverse Leakage Current	V_R=100V	--	--	0.2	mA
		V_R=100V, T_J=125	--	--	2	mA
V_F	Forward Voltage	I_F=200A	--	0.90	--	V

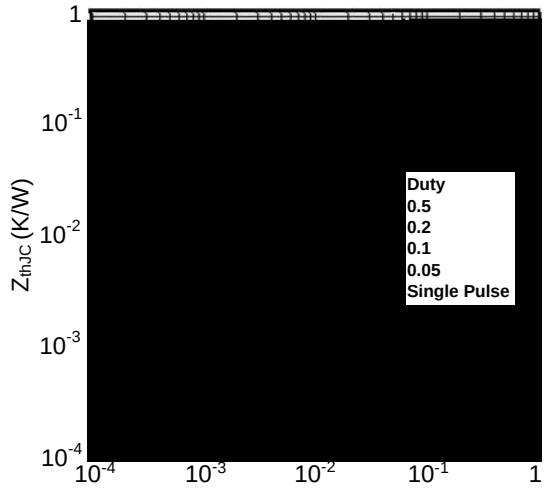


Figure6. Transient Thermal Impedance

Package Outline

