ShiLing®

浙江世菱半导体有限公司

ZHEJIANG SHILING SEMICONDUCTOR CO.,LTD.

Specifcation of products

：

：MURP2001200

ZHEJIANG SHILING SEMICONDUCTOR CO.,LTD.

0578 3012571 3615078

0578 3611180

323000

E-mail:smrshiling01@163.com

Http//www.smrshiling.com

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Ultra-Fast Soft Recovery Diode Module

Description

Ultra-FRD moduledevices are optimizedto reduce losses
and EMI/RFI in high frequency power conditioning electrical systems.
These diode modules are ideallysuited for power converters,
motorsdrives and other applications where switching losses
are significant portion of the total losses

Features

☞ Repetitive Reverse Voltage V_{RRM}:= 1200V
☞Low Forward Voltage Drop (typ.)= 1.2V
☞ Average Forward Current I_F :(AV.) = 200A @ Tc= 100℃
☞ Ultra-Fast Reverse Recovery Time : t_{rr}(typ.) = 130 ns
☞Extensive Characterizationof Recovery Parameters
☞Reduced EMI and RFI
☞Non Isolation Type Package

Applications

MotorDrives,Free wheel use, High Power Converters Welders
Various Switching and Telecommunication Power Supply.

AbsoluteMaximum Ratings@ T_j =25℃(Per Leg)

Symbol	Parameter	Conditions	Ratings	Unit
V_{RRM}	Repetitive Peak ReverseVoltage			
$V_{R(DC)}$	Reverse DC Voltage			
$I_{F(AV)}$	Average Forward Current @ Tc= 25℃ @ Tc= 100℃			
I_{FSM}	Surge(non-repetitive) Forward Current			
I_t^2	I^2t for Fusing			
Tj T_{stg} P_d	Junction Temperature Storage Temperature Maximum Power Dissipation			
–	Mounting Torque			
–				

Thermal Characteristics

Symbol	Parameter	Conditions	Values			Unit
			Min.	Typ.	Max.	
$R_{th(j-c)}$	ThermalResistance	Junction to Case	-	-	0.15	℃/W

Electrical Characteristics @T_j=25℃(unlessotherwise specified)

Symbol	Parameter	Conditions		Values			Unit
				Min.	Typ.	Max.	
V_R	Cathode Anode Breakdown Voltage	I_R= 100uA		1200	-	-	V
V_{FM}	Maximum ForwardVoltage	I_{FM} = 200A, T_c= 25℃		-	1.2	1.5	V
		I_{FM} = 200A, T_c=100℃		-	1.0	1.2	V
I_{RRM}	Repetitive Peak Reverse Current	T_C= 100℃,V_{RRM} applied		-	-	8.5	mA
T_{rr}	Reverse Recovery Time	I_{FM} = 200A, V_R = 300V di/dt=-100A/us	T_C= 25℃	-	130	150	ns
			T_C= 100℃	-	180	-	ns

Rating and Characteristic

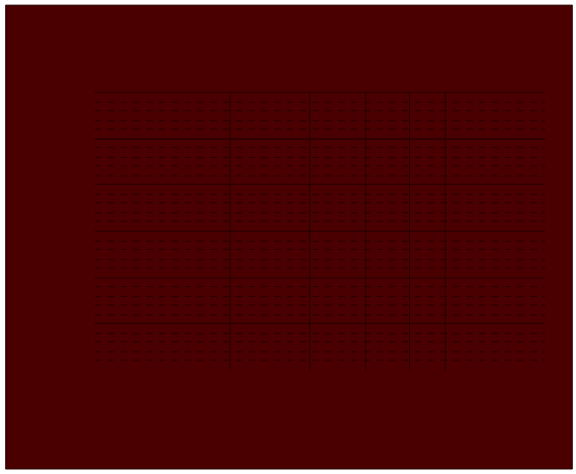

Fig. 2 : Typical Reverse Recovery Time vs. -di/dt

Outside Dimension

