- 1.2kv schottky Rectifier
- Zero Reverse Recovery Current / Zero forward recovery
- High-Frequency Operation
- Temperature-Independent Switching Behavior
- Low forward voltage
- Positive Temperature Coefficient on V_F
- Increased Creepage/Clearance Distance



S1D040120B	4.300 x 4.300	Al	Ag

		(T_C = 135)		
S1D040120B	1200V	58A	206nC	175

(Tc = 25°C unless otherwise specified)

V_{RRM}	Repetitive Peak Reverse Voltage	1200	V	-	
V_{RSM}	Surge Peak Reverse Voltage	1300	V	-	
V_R	DC Peak Reverse Voltage	1200	V	-	
I_F	Continuous Forward Current	120 58 40	A	Tc = 25˚C Tc = 135˚C Tc = 152˚C	Note1
I_{FSM}	Non-Repetitive Peak Forward Surge Current	330	A	Tc = 25 tp = 10ms Half Sine Pulse	
T_{stg} ,T_J	Operating Junction Range	-55 to +175		-	

Note1. Assumes $R_{\theta JC}$ Thermal Resistance of 0.3 ˚C/W or less

Datasheet

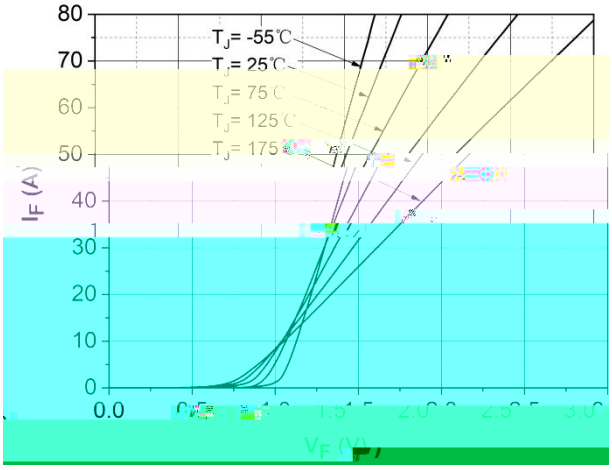


Figure 1. Forward Characteristics

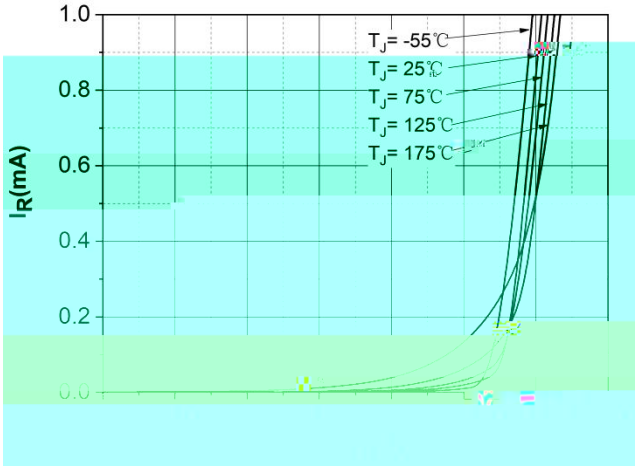


Figure 2. Reverse Characteristics

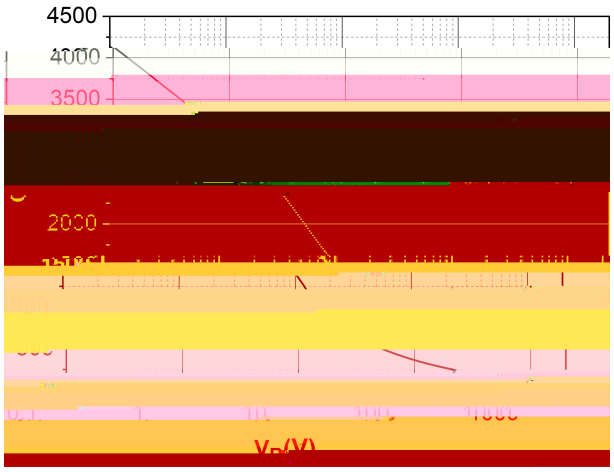


Figure 3. Capacitance vs. Reverse Voltage

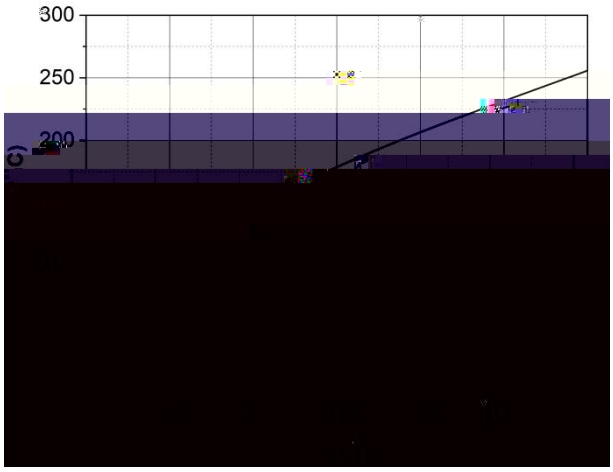


Figure 4. Recovery Charge vs. Reverse Voltage

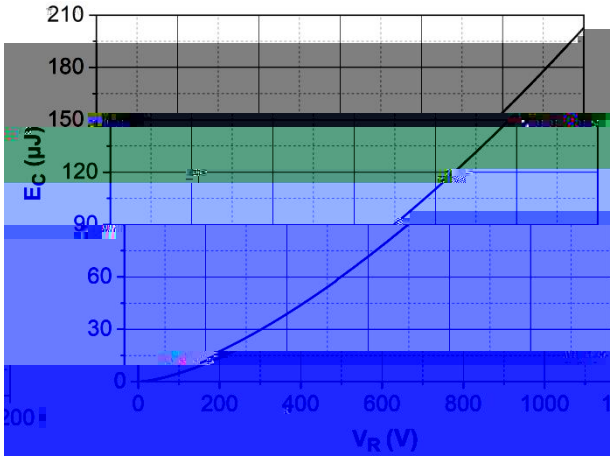


Figure 5. Typical Capacitance Stored Energy

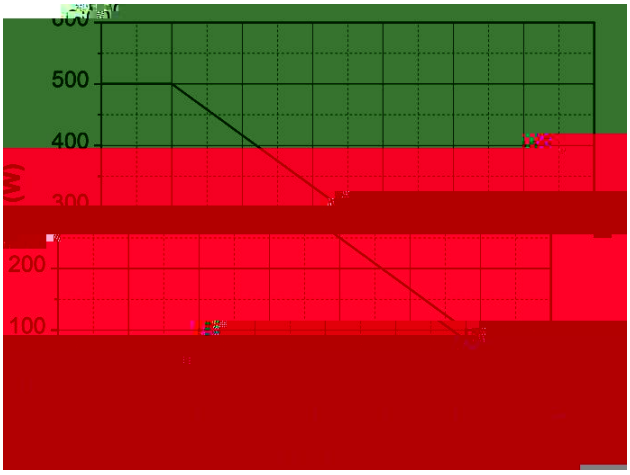


Figure 6. Power Derating

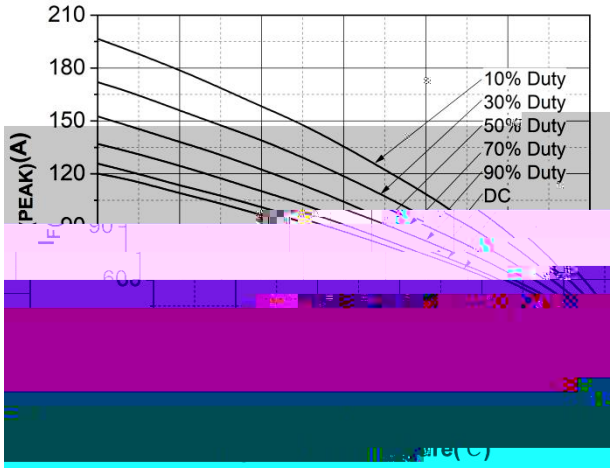


Figure 7. Current Derating

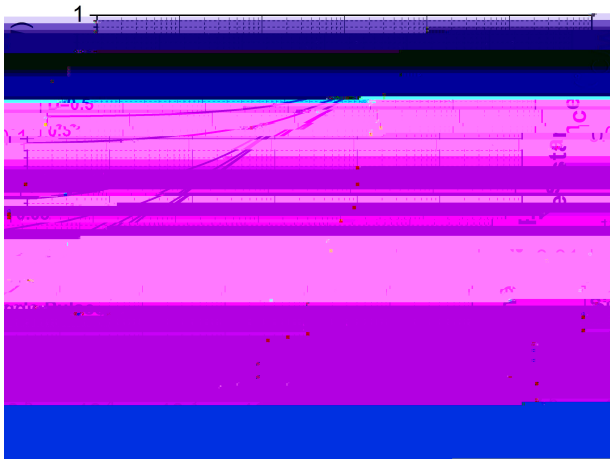


Figure 8. Transient Thermal Impedance

7. Except as otherwise explicitly approved by Sichain in a written document signed by authorized representatives of Sichain, Sichain' products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury.

8. For use of our products in applications requiring a high degree of reliability (as exemplified below), please contact and consult with a Sichain representatives, for example but not limited to: transportation equipment,primary communication equipment,traffic lights,fire/crime prevention, safety equipment, medical systems, and power transmission systems.