

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low Reverse Current
- High Surge Current Capability
- Low Forward Voltage

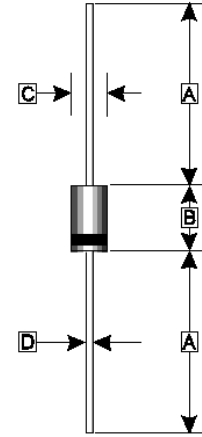
MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL94V-0 Rate Flame Retardant
- Lead: Axial Leads, Solderable Per MIL-STD-202, Method 208 Guaranteed
- Polarity: Cathode Band
- Mounting Position: Any

ORDER INFORMATION

Part Number	Type
SRL15100	Lead (Pb)-free
SRL15100-C	Lead (Pb)-free and Halogen-free

DO-27(DO-201)



REF.	Millimeter	
	Min.	Max.
A	25.4 TYP.	
B	7.20	9.53
C	4.80	5.60
D	1.10	1.32

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	I_F	15	A
Peak Forward Surge Current @8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	250	A
Typical Thermal Resistance from Junction-Lead ¹	$R_{\theta JL}$	12	$^\circ\text{C}/\text{W}$
Operating Junction & Storage Temperature Range	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

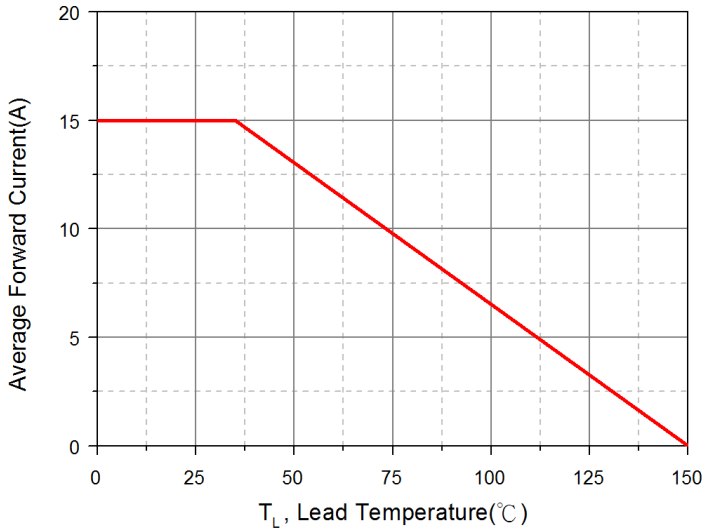
Parameter	Symbol	Typ.	Max.	Unit	Test Conditions
Maximum Instantaneous Forward Voltage	V_F	0.43	-	V	$I_F=3\text{A}, T_A=25^\circ\text{C}$
		0.56	-		$I_F=10\text{A}, T_A=25^\circ\text{C}$
		0.65	0.7		$I_F=15\text{A}, T_A=25^\circ\text{C}$
		0.59	-		$I_F=15\text{A}, T_A=125^\circ\text{C}$
Maximum DC Reverse Current @Rated DC Blocking Voltage ²	I_R	-	0.3	mA	$T_A=25^\circ\text{C}$
		-	15		$T_A=100^\circ\text{C}$
Typical Junction Capacitance ³	C_J	900	-	pF	

Notes:

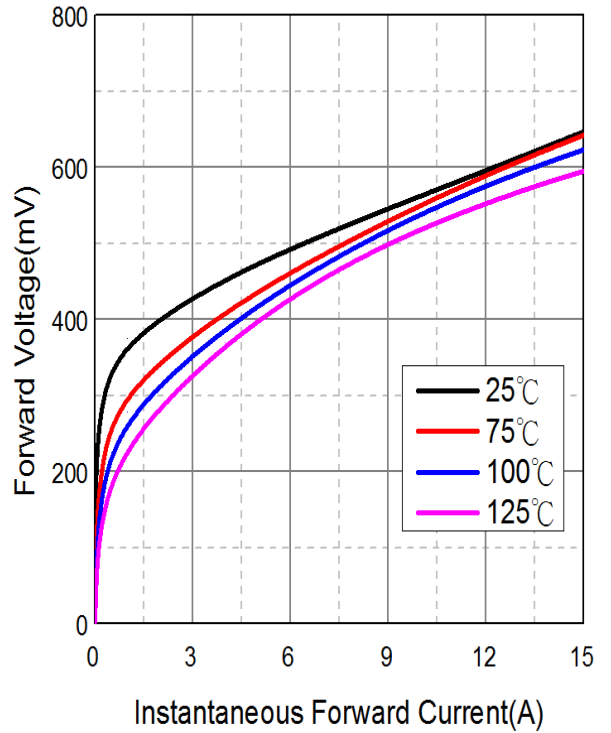
1. The testing condition of the thermal resistance is based on 0mm lead between two 10cm x 10cm x 1mm copper pad.
2. Pulse Test: Pulse Width=300 μs , Duty Cycle $\leq 2\%$.
3. Measured at 1MHz and applied with 5V D.C reverse voltage.

CHARACTERISTIC CURVES

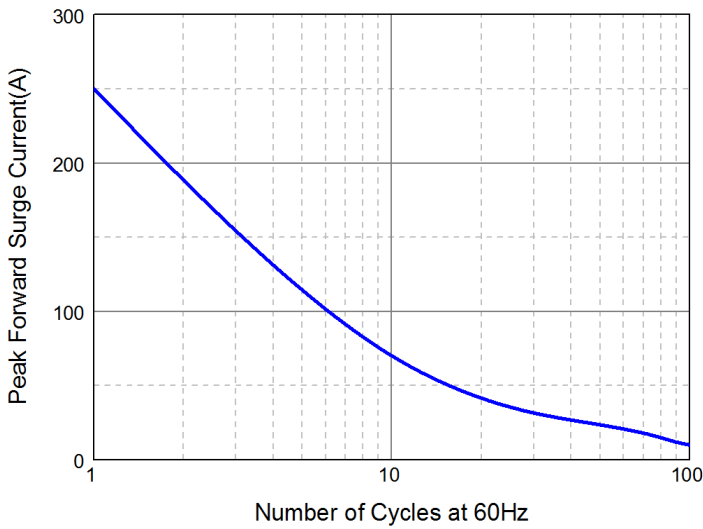
Typical Forward Current Derating Curve



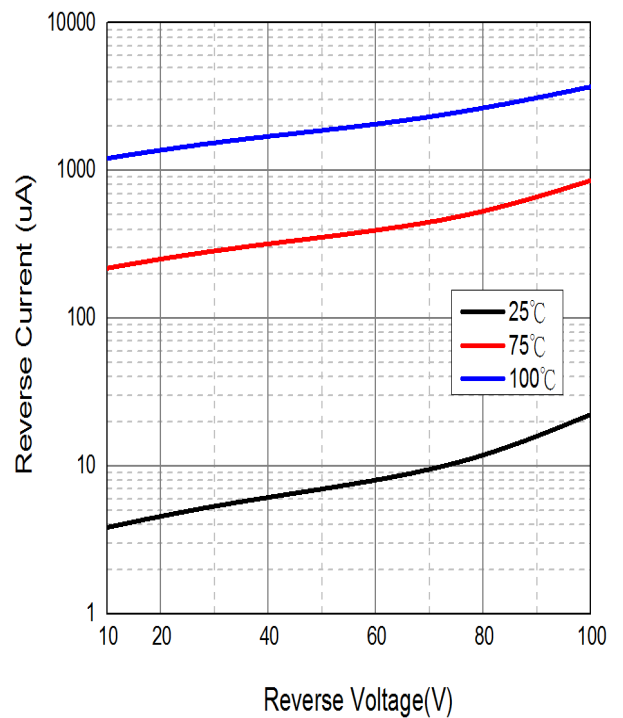
Typical Forward Characteristic



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

