Elektronische Bauelemente

SRL8100

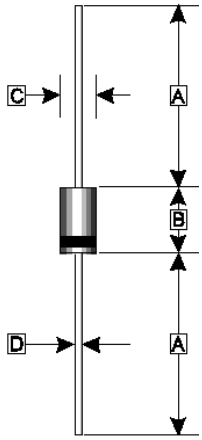
Voltage 100V, 8Amp
Low VF Trench Barrier Schottky Rectifier

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

FEATURES

- Trench Barrier Schottky technology
- Low forward voltage drop, low power losses.
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

DO-27(DO-201)



REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	7.20	9.50
C	4.80	5.60
D	1.10	1.30

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any

ORDER INFORMATION

Part Number	Type
SRL8100	Lead (Pb)-free
SRL8100-C	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	100	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	I_F	8	A
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)	I_{FSM}	100	A
Typical Thermal Resistance	$R_{\theta JC}$	15	°C /W
Operating and Storage Temperature Range	T_J,T_{STG}	-55~150	°C

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	V_F	0.44	-	V	I_F=2A,T_A=25°C
		-	0.69		I_F=8A,T_A=25°C
		-	0.71		I_F=10A,T_A=25°C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	-	0.2	mA	T_A=25°C
		-	20		T_A=100°C
Typical Junction Capacitance [1]	C_J	680	-	pF	

Notes:
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1-Typical Forward Current Derating Curve

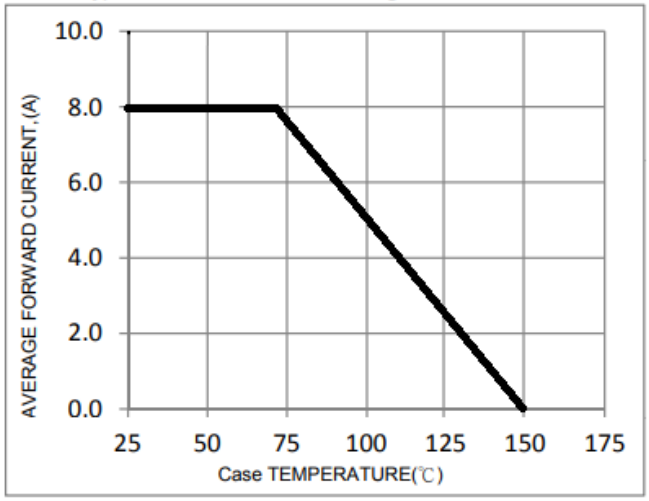


FIG. 2-Typical Forward Characteristics

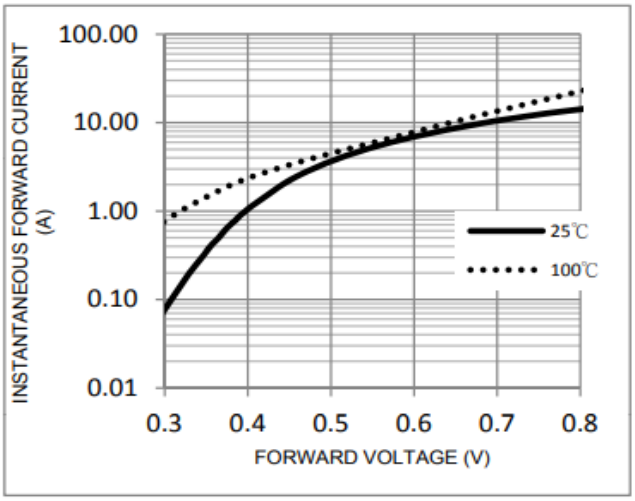


FIG. 3-Maximum Non-Repetitive Forward Surge Current

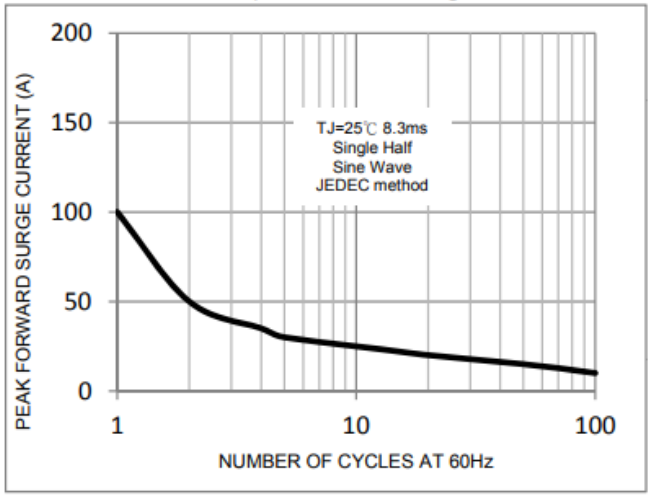


FIG. 4-Typical Reverse Characteristics

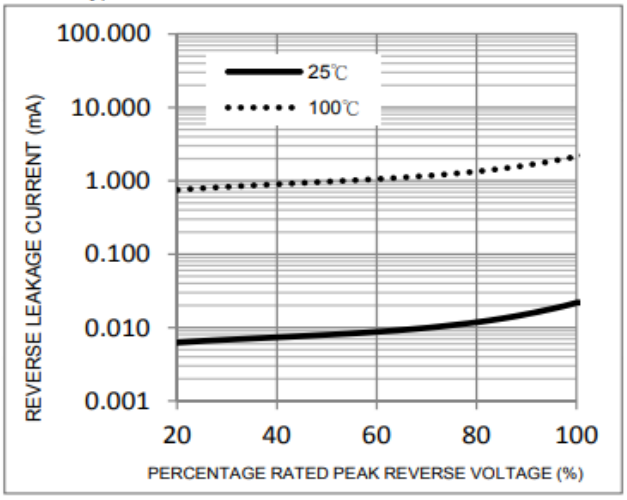


FIG. 5-Typical Junction Capacitance