Elektronische Bauelemente

SRL5100

Voltage 100V 5.0 Amp

Low VF Trench MOS Barrier Schottky Rectifier

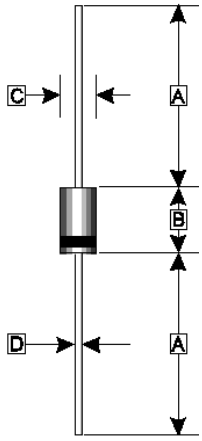
RoHS Compliant Product

A suffix of “-C” specifies halogen free

FEATURES

- Trench MOS Schottky technology
- Low forward voltage drop
- Low reverse current
- 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: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 1.1 g (Approximate)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25℃ ambient temperature unless otherwise s pecified. 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
Working Peak Reverse Voltage	V_{RSM}	100	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	I_F	5	A
Peak Forward Surge Current, 8.3 ms single half sine-wave	I_{FSM}	80	A
Voltage Rate of Chance (Rated V_R)	dv/dt	10000	V / μs
Typical Thermal Resistance	$R_{\theta JC}$	12	℃ /W
Operating and Storage Temperature Range	T_J,T_{STG}	-40~150	℃

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	V_F	0.55	0.63	V	I_F = 3A, T_J = 25℃
		0.65	0.75		I_F = 5A, T_J = 25℃
		0.60	-		I_F = 5 A, T_J = 125℃
Maximum DC Reverse Current at Rated DC Blocking Voltage [2]	I_R	-	0.1	mA	T_J=25℃
		-	10		T_J=100℃
Typical Junction Capacitance [1]	C_J	300	-	pF	

NOTES:

1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test：Pulse Width = 300 μs, Duty Cycle ≦ 2.0%.

RATINGS AND CHARACTERISTIC CURVES

