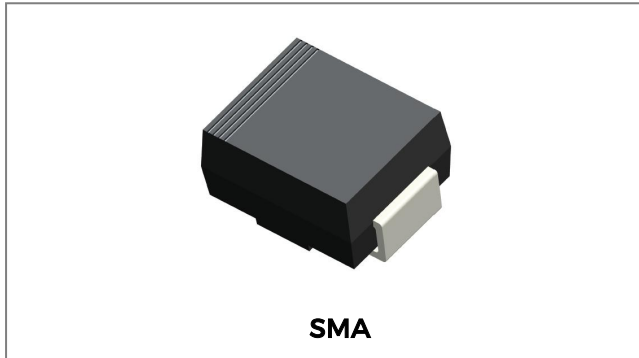


SL21A SCHOTTKY RECTIFIER



Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- Terminals finish: 100% Pure Tin
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Applications

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection
- Disk drives
- Battery charging

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Repetitive Reverse Voltage	V_{RRM}	-	10	V
Working Peak Reverse Voltage	V_{RWM}			
DC Blocking Voltage	V_R			
Average Rectified Forward Current	$I_{F(AV)}$	50% duty cycle @ $T_L=110^{\circ}C$, rectangular wave form	2	A
Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3ms, Half Sine pulse, $T_c = 25^{\circ}C$	50	A

Electrical Characteristics:

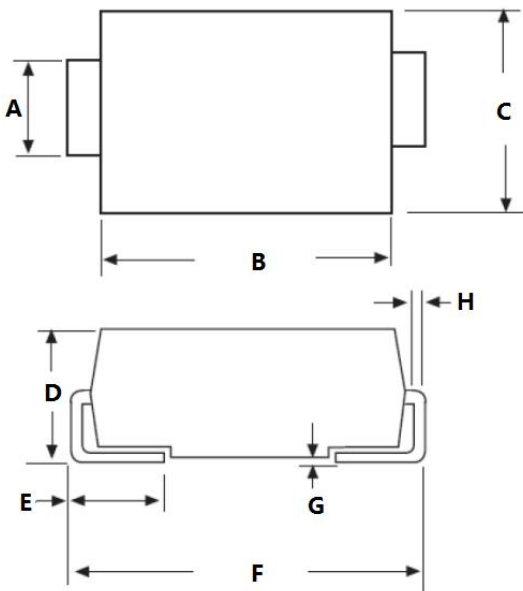
Characteristics	Symbol	Condition	Typ.	Max.	Units
Forward Voltage Drop*	V_{F1}	@ 2A, Pulse, $T_j = 25^{\circ}C$	-	0.35	V
	V_{F2}	@ 2A, Pulse, $T_j = 100^{\circ}C$	-	0.26	V
Reverse Current*	I_{R1}	@ $V_R = \text{rated } V_R, T_j = 25^{\circ}C$	--	0.7	mA
	I_{R2}	@ $V_R = \text{rated } V_R, T_j = 100^{\circ}C$	-	60	mA
Series Inductance	L_s	Measured lead to lead 5 mm from package body	8.0	-	nH
Voltage Rate of Change	dv/dt	-	-	10,000	V/ μ s

* Pulse width < 300 μ s, duty cycle < 2%

Thermal-Mechanical Specifications:

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	T_J	-	-55 to +125	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-	-55 to +125	$^{\circ}\text{C}$
Maximum Thermal Resistance Junction to Lead	$R_{\theta JL}$	-	15	$^{\circ}\text{C}/\text{W}$
Maximum Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	-	81	$^{\circ}\text{C}/\text{W}$
Approximate Weight	wt	-	0.06	g

Mechanical Dimensions SMA



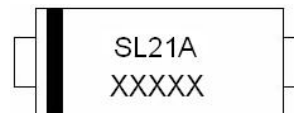
SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.25	1.65	0.049	0.065
B	3.95	4.60	0.156	0.181
C	2.25	2.95	0.089	0.116
D	1.95	2.90	0.077	0.114
E	0.75	1.60	0.030	0.063
F	4.80	5.60	0.189	0.220
G	0.05	0.20	0.002	0.008
H	0.15	0.41	0.006	0.016

Ordering Information

Device	Package	Shipping
SL21A	SMA (Pb-Free)	5000pcs / reel
SL21ATR	SMA (Pb-Free)	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

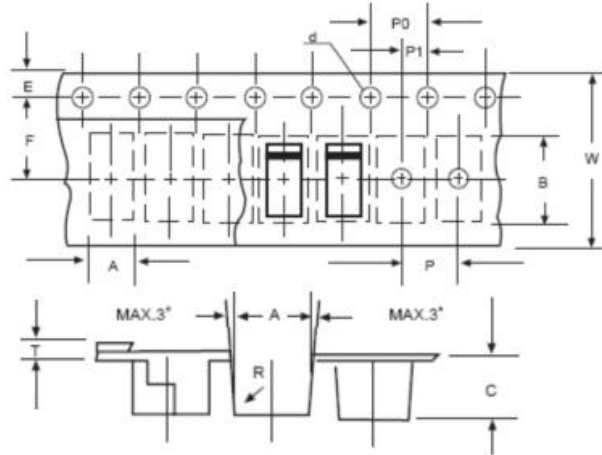


Where XXXXX is YYWWL

- SL = Device Type
- 2 = Forward Current (2A)
- 1 = Reverse Voltage (10V)
- A = Package type
- YY = Year
- WW = Week
- L = Lot Number

Cautions: Molding resin
Epoxy resin UL94V-0

Carrier Tape Specification SMA



SYMBOL	Millimeters	
	Min.	Max.
A	2.97	3.17
B	5.70	5.90
C	2.32	2.52
d	1.40	1.60
E	1.40	1.60
F	5.60	5.70
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
T	0.25	0.35
W	11.80	12.20

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