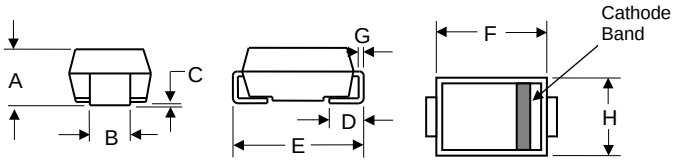
SL22 thru SL210

Surface Mount Schottky Barrier Rectifiers

Features

* Ideal for automated placement
* Low forward voltage drop
* Low leakage current
* Meets environmental standard MIL-S-19500D
* Moisture sensitivity:level 1, per J-STD-020
* Solder dip 260℃, 10 s

RoHS COMPLIANT



DO-214 AA (SMB)				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.081	0.103	2.06	2.62
B	0.114	0.126	2.90	3.20
C	---	0.008	---	0.20
D	0.030	0.060	0.76	1.52
E	0.305	0.320	7.75	8.13
F	0.260	0.280	6.60	7.11
G	0.006	0.012	0.152	0.305
H	0.220	0.245	5.59	6.22

Typical Applications

* For use in general purpose rectification of lighting, power supplies, inverters, converters and freewheeling diodes for consumer, automotive and telecommunication.

Mechanical Data

* Case: DO-214AA, molded epoxy body
* Epoxy meets UL 94V-0 flammability rating
* Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD22B-106
* Polarity: Laser Band Denotes Cathode Band

Primary Characteristics

$I_{F(AV)}$	2 A
V_{RRM}	20 V to 100 V
I_{FSM}	45A
V_F	0.42V, 0.47V, 0.72V
T_J max.	125 °C , 150°C

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Maximum Ratings (T_A=25℃ unless otherwise noted)

PARAMETER	SYMBOL	SL22	SL23	SL24	SL25	SL26	SL27	SL28	SL29	SL210	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	V
Maximum average forward rectified current at T_L (See Fig.1)	$I_{F(AV)}$	2									A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	45									A
Operating junction temperature range	T_J	- 55 to + 125			- 55 to + 150						°C
Storage temperature range	T_{STG}	- 55 to + 150									°C

Electrical Characteristics (T_A=25℃ unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	SL22	SL23	SL24	SL25	SL26	SL27	SL28	SL29	SL210	UNIT
Maximum instantaneous forward voltage	I_F=2 A	V_F	0.42			0.47		0.72				V
Maximum DC reverse current at rated DC blocking voltage	T_A=25℃	I_R	0.2			0.15						mA
	T_A=100℃		20			TBD						
Typical junction capacitance	4.0 V, 1 MHz	C_J	175									pF

Thermal Characteristics (T_A=25℃ unless otherwise noted)

PARAMETER	SYMBOL	SL22	SL23	SL24	SL25	SL26	SL27	SL28	SL29	SL210	UNIT
Maximum thermal resistance	$R_{\theta JA}$ (1)	72									°C/W
	$R_{\theta JT}$ (2)	22									

Notes: (1) Thermal resistance from junction to ambient,0.276×0.276"（7.0×7.0mm）copper pads to each terminal
(2) Thermal resistance from junction to terminal, 0.276×0.276"（7.0×7.0mm）copper pads to each terminal

Ratings and Characteristic Curves

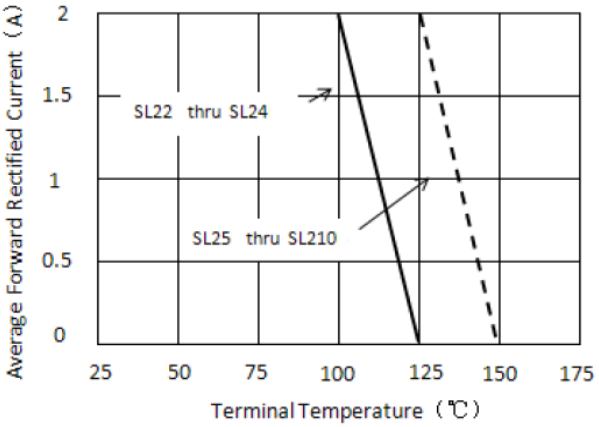

Figure 1. Forward Current Derating Curve

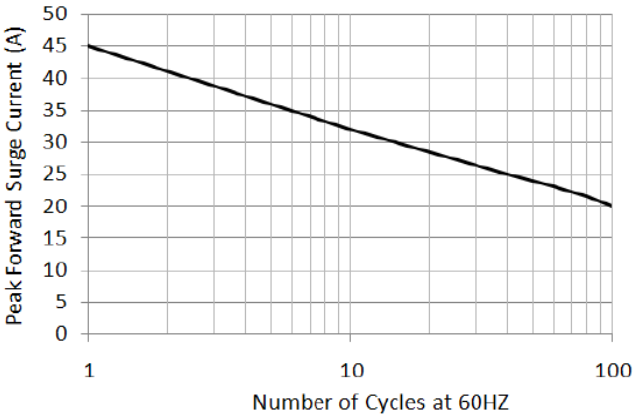

Figure 2.Maximum Non-repetitive Peak Forward Surge Current

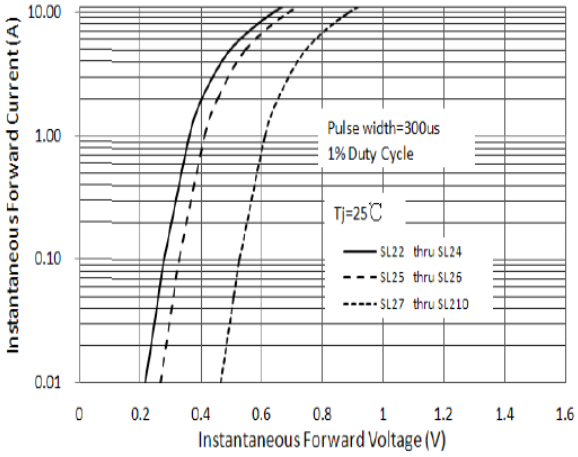

Figure 3. Typical Instantaneous Forward Characteristics

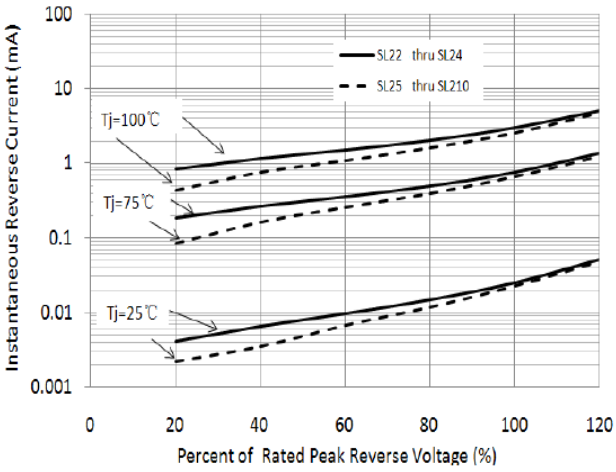

Figure 4. Typical Reverse Characteristics

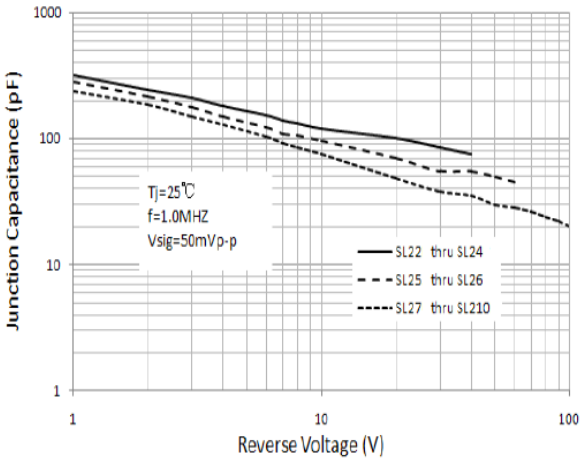

Figure 5. Typical Junction Capacitance

Ordering Information

Part No.	Package	Packing Code	Packing
SL22 thru SL210	DO-214 AA (SMB)	R30	3000pcs/Reel

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