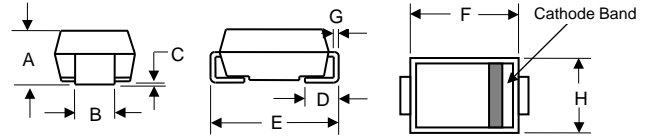


Features

- * 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°C, 10s



RoHS
COMPLIANT



Typical Applications

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

DIM	SMA			
	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.078	0.090	1.98	2.29
B	0.052	0.058	1.32	1.47
C	---	0.008	---	0.20
D	0.030	0.052	0.76	1.32
E	0.193	0.208	4.90	5.28
F	0.157	0.177	3.99	4.50
G	0.006	0.012	0.152	0.305
H	0.100	0.110	2.54	2.79

Mechanical Data

- * Case: DO-214AC, 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 (T_A=25°C unless otherwise noted)

SYMBOL	VALUE
I _{F(AV)}	1 A
V _{RRM}	20 V to 100 V
I _{FSM}	30A
V _F	0.42V, 0.5V, 0.68V
T _{J max.}	125 °C , 150°C



SL12 THRU SL110

Surface Mount Schottky Barrier Rectifiers

Maximum Ratings (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	SL12	SL13	SL14	SL15	SL16	SL17	SL18	SL19	SL110	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)}	1									A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	30									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°C unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	SL12	SL13	SL14	SL15	SL16	SL17	SL18	SL19	SL110	UNIT
Maximum instantaneous forward voltage	I _F =1 A	V _F	0.42			0.5		0.68				V
Maximum DC reverse current at rated DC blocking voltage	T _A =25°C	I _R	0.2									mA
	T _A =100°C		10									
Typical junction capacitance	4.0 V, 1 MHz	C _J						85				pF

Thermal Characteristics (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	SL12	SL13	SL14	SL15	SL16	SL17	SL18	SL19	SL110	UNIT
Maximum thermal resistance	R _{θJA} (1)	TBD									°C/W
	R _{θJT} (2)	TBD									

Notes: (1) Thermal resistance from junction to ambient, 0.197×0.197 " (5.0×5.0mm) copper pads to each terminal

(2) Thermal resistance from junction to terminal, 0.197×0.197 " (5.0×5.0mm) copper pads to each terminal

Ratings and Characteristic Curves

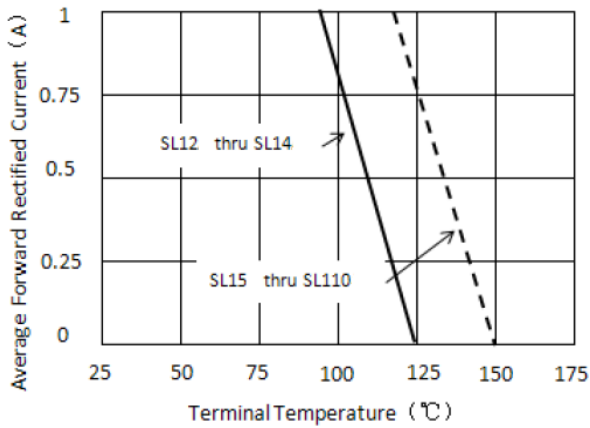


Figure 1. Forward Current Derating Curve

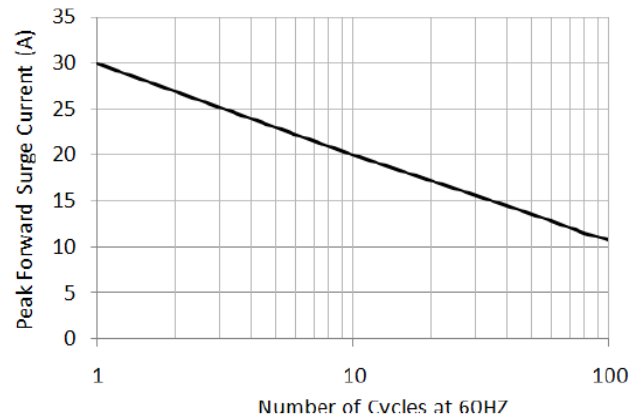


Figure 2. Maximum Non-repetitive Peak Forward Surge Current

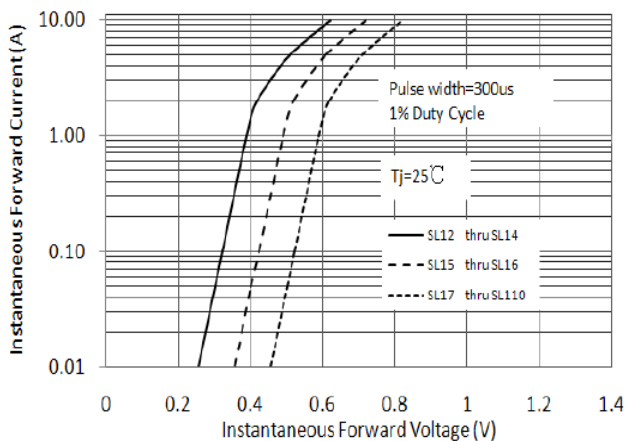


Figure 3. Typical Instantaneous Forward Characteristics

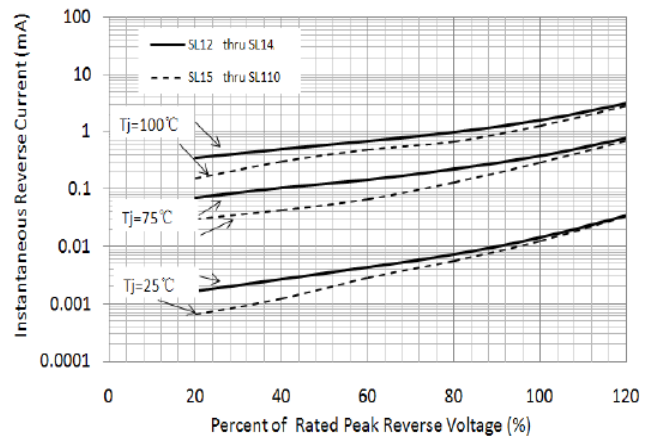


Figure 4. Typical Reverse Characteristics

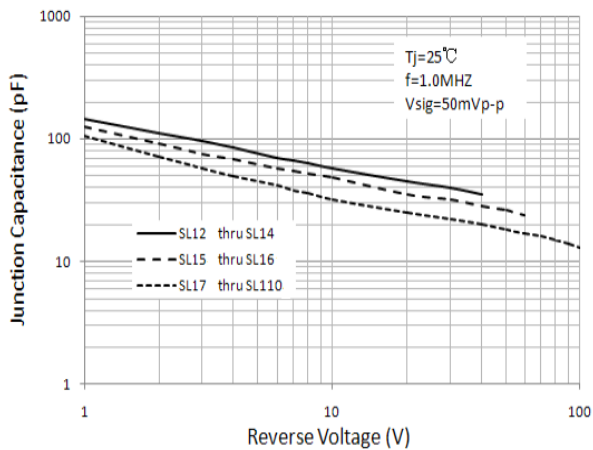


Figure 5. Typical Junction Capacitance



SL12 THRU SL110 Surface Mount Schottky Barrier Rectifiers

Ordering Information

Part No.	Package	Packing Code	Packing
SL12 THRU SL110	SMA	R50	5000pcs/Reel

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