

FrelTec GmbH

Mathildenstr, 10A
82319 Starnberg
Germany

Surface Mount Schottky Barrier
Rectifier
SMA

SMA

Surface Mount Schottky Barrier Rectifier

SPECIFICATION

68B	SL_Axxxxx	SMA	L0H
Type	Type	Package	Packing
63B: Surface Mount Schottky Barrier Rectifier	SL_A	SMA	L0H: tape and Reel(embossed tape) for 7500 pc (13'reel)

All products according to RoHS (2015/863/EU)

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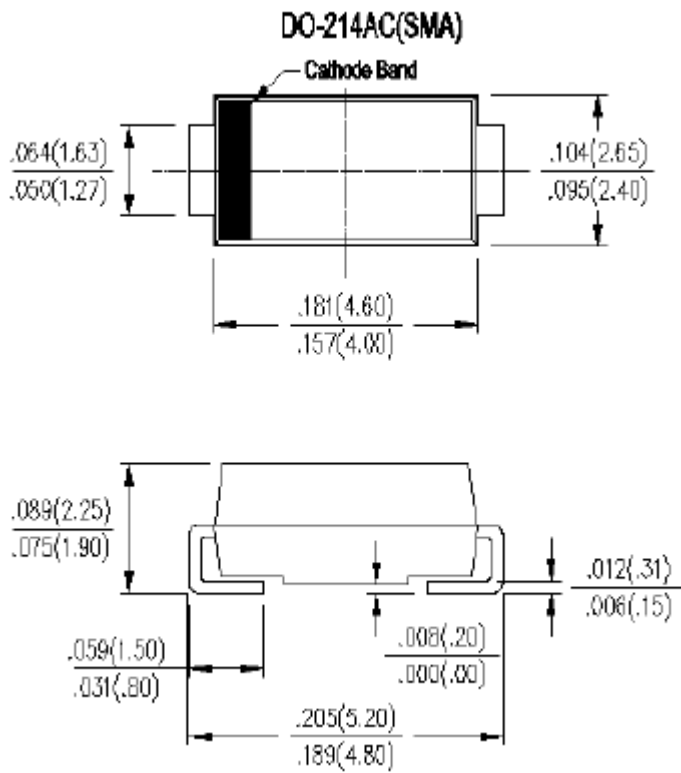
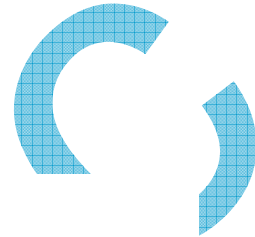
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SL_A

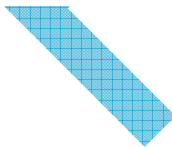
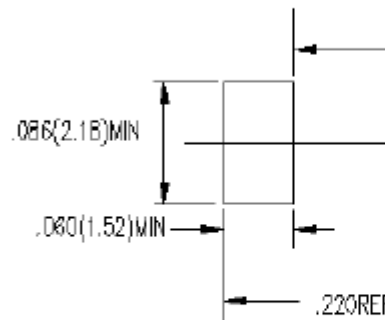
PACKAGE OUTLINE



DO-214AC (SMA)



MOUNTING



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Surface Mount Schottky Barrier Rectifier

PRIMARY CHARACTERISTICS	
IF(AV)	3 A
VRRM	20 V to 100 V
IFSM	80A
VF	0,42V · 0,5V · 0,75V
TJ max.	125 °C · 150 °C

MAXIMUM RATINGS (TA = 25 °C unless otherwise noted)											
PARAMETER	SYMBOL	SL3 2A	SL3 3A	SL3 4A	SL3 5A	SL3 6A	SL3 7A	SL3 8A	SL3 9A	SL310 A	UNIT
Maximum repetitive peak reverse voltage	VRRM	20	30	40	50	60	70	80	90	100	V
Maximum RMS	VRMS	14	21	28	35	42	49	56	63	70	V
Maximum DC blocking voltage	VDC	20	30	40	50	60	70	80	90	100	V
Maximum average forward rectified current at TL (See Fig,1)	IF(AV)	3									A
Peak forward surge current 8,3ms single half sine-wave superimposed on rated load	IFSM	80									A
Operating junction temperature range	TJ	- 55 to + 125				- 55 to + 150					°C
Storage temperature range	Tstg	- 55 to + 150									°C

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ELECTRICAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)												
PARAMETER	TEST CONDITIONS	SYMBOL	SL3 2A	SL3 3A	SL3 4A	SL3 5A	SL3 6A	SL3 7A	SL3 8A	SL3 9A	SL31 0A	UNIT
Maximum instantaneous	IF=3 A	VF	0,42			0,5		0,75				V
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	IR	0,2					0,05				mA
	TA=100 °C		50					4				
Typical junction capacitance	4,0 V, 1 MHz	CJ	285									pF

THERMAL CHARACTERISTICS (TA = 25 °C unless otherwise noted)												
PARAMETER	SYMBOL	SL3 2A	SL3 3A	SL3 4A	SL3 5A	SL3 6A	SL3 7A	SL3 8A	SL3 9A	SL31 0A	UNIT	
Maximum thermal resistance	REJA ⁽¹⁾	80									°C/W	
	REJT ⁽²⁾	20										

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

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RATINGS AND CHARACTERISTIC CURVES

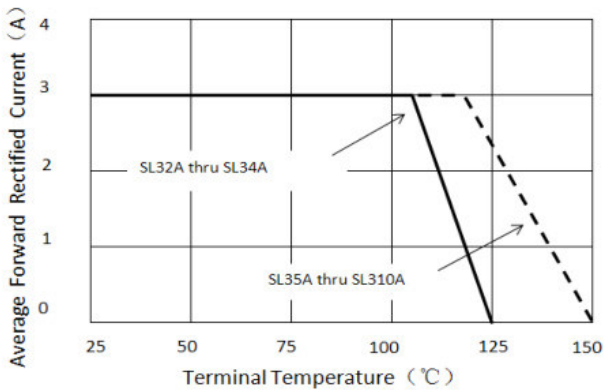


Figure 1. Forward Current Derating Curve

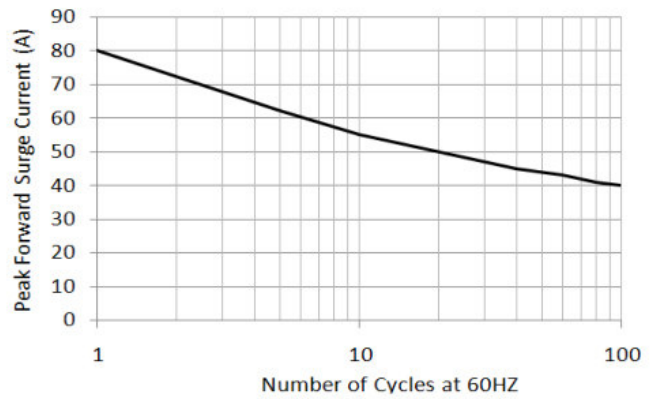


Figure 2. Maximum Non-repetitive Peak Forward Surge Current

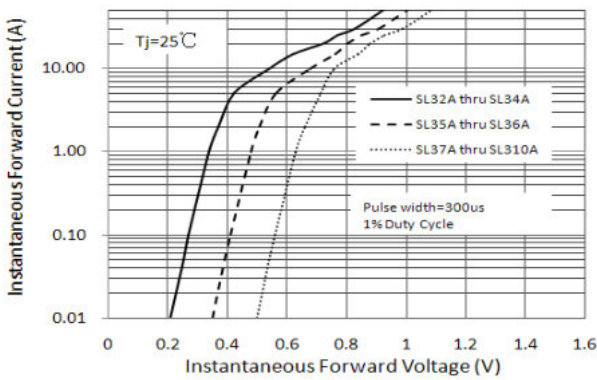


Figure 3. Typical Instantaneous Forward Characteristics

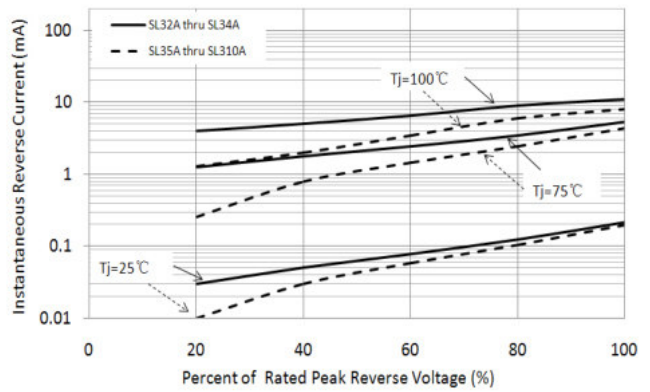


Figure 4. Typical Reverse Characteristics

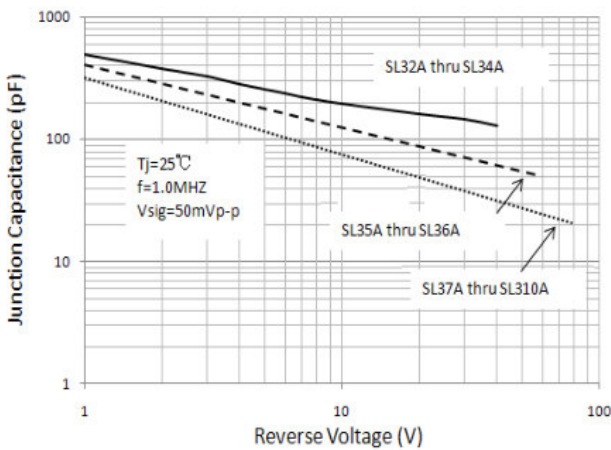
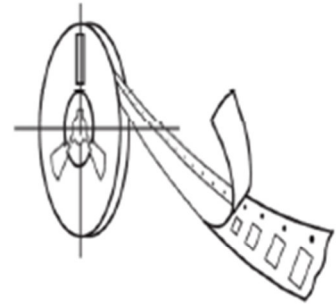
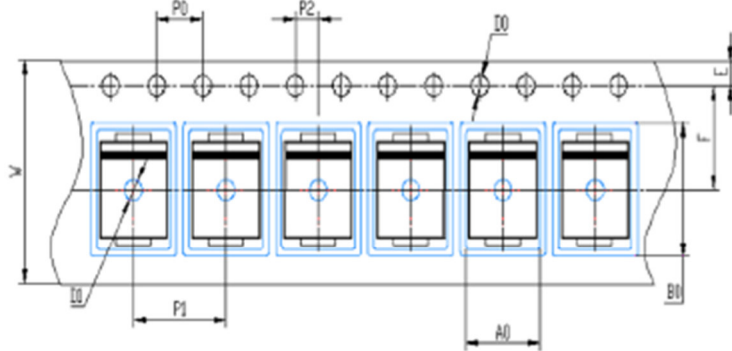


Figure 5. Typical Junction Capacitance

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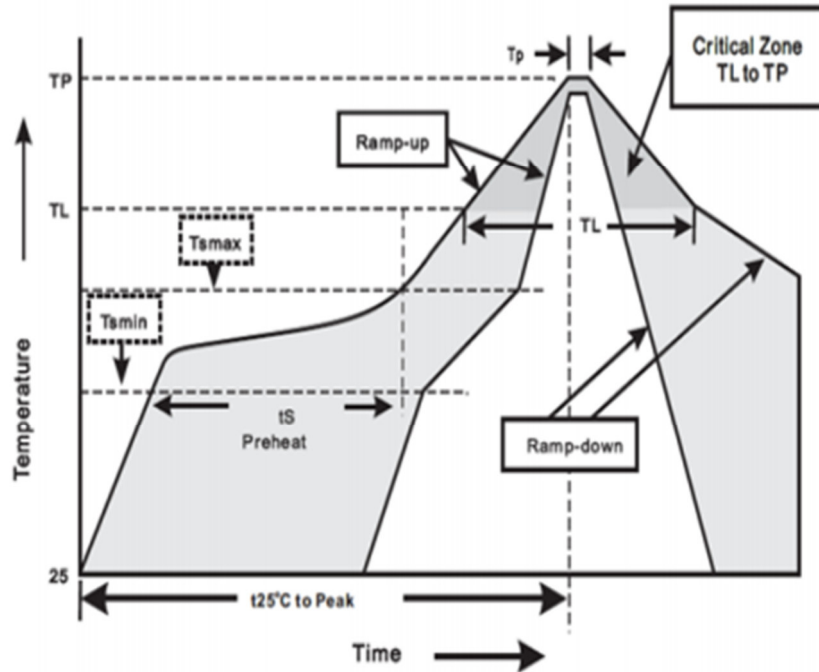
Tape & Reel Specification



Symbol	SMA (mm)
W	12 ± 0.2
E	1.75 ± 0.1
F	5.5 ± 0.05
D0	1.5 ± 0.1
D1	1.50 +0.1/-0
P0	4.0 ± 0.1
P1	4.0 ± 0.1
P2	2.0 ± 0.05
A0	2.65 ± 0.1
B0	5.25 ± 0.1



Soldering Parameters



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Stock period

The performance of these products, including the solderability, is guaranteed for 12 month, provided that they remain packed as they were when delivered and stored at a temperature of 20-30°C and a relative humidity 20-60%RH

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