

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

General-purpose Rectifier
SMC

SMC

SPECIFICATION

683	S3_ xxxxxxxx	SMCX	L03
Type	Type	Package	Packing
683: General- purpose Rectifier	S3_	SMC	L03: tape in box (paper tape) for 3k pc

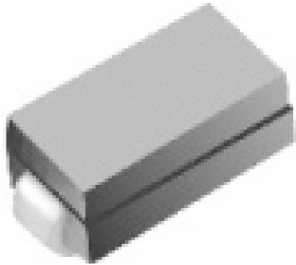
All products according to RoHS (2015/863/EU)

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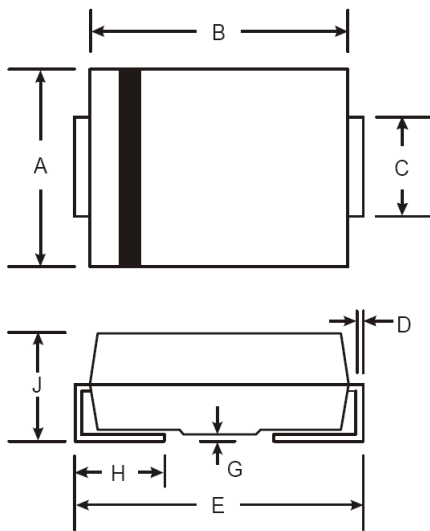
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General-purpose Rectifier
S3A thru S3M

PACKAGE OUTLINE



DIMENSIONS



Dim	Min(mm)	Max(mm)
A	5,59	6,22
B	6,60	7,11
C	2,75	3,25
D	0,15	0,31
E	7,75	8,13
G	0,05	0,20
H	0,76	1,27
J	2,00	2,62

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Maximum Ratings & Characteristics

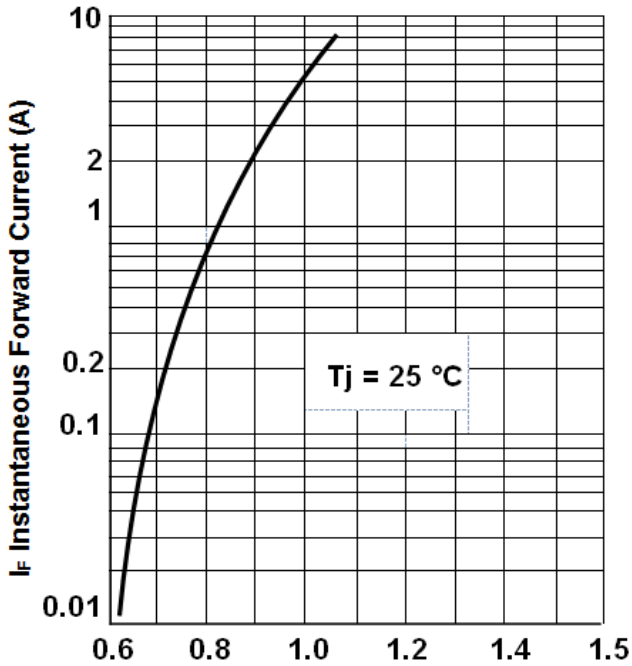
Ratings at 25°C ambient temperature unless otherwise specified

Parameter	Symbols	S3A	S3B	S3D	S3G	S3J	S3K	S3M	Unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VR(RMS)	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	IF(AV)	3,0							A
IF=1,0A Maximum forward voltage	VF	1,1							V
Peak forward surge current 8,3 ms single half sine-wave	IFSM	100							A
Maximum reverse current TA = 25°C TA =100°C	IR	10 250							uA
Typical thermal resistance	Rsja	47							°C /W
VR = 4,0V f = 1,0MHz Type junction capacitance	Cj	60							PF
Operating junction and storage temperature range	Tj, Tstg	-55 ...+150							°C

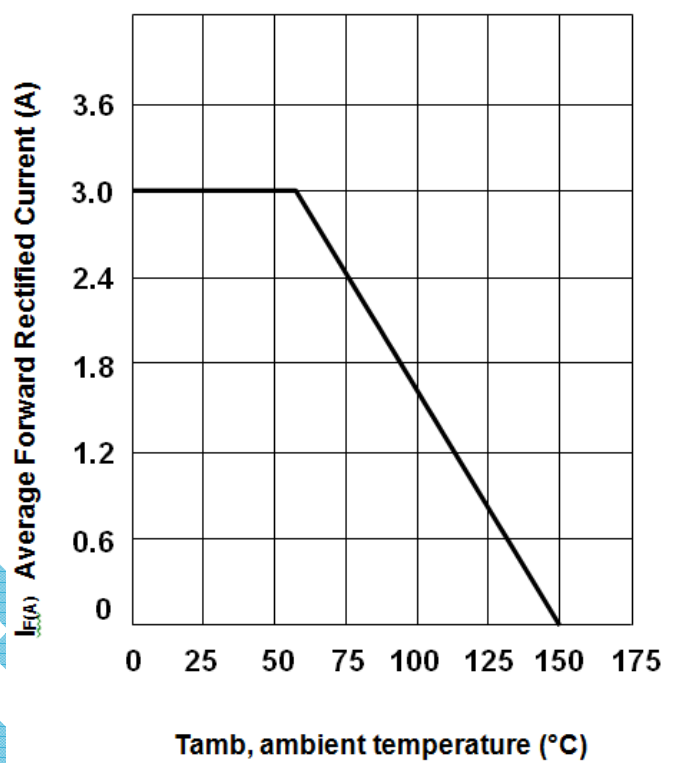
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Characteristics(Typical)

TYPICAL FORWARD CHARACTERISTIC

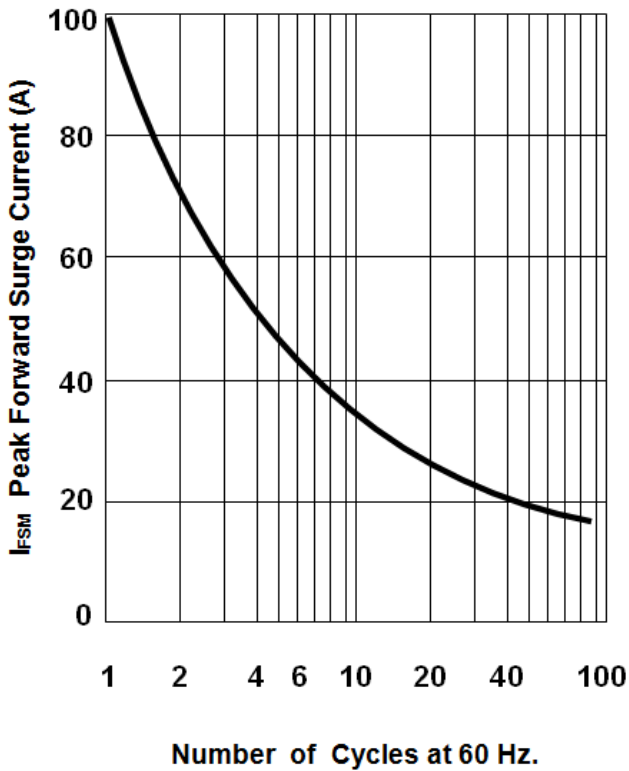


FORWARD CURRENT DERATING CURVE

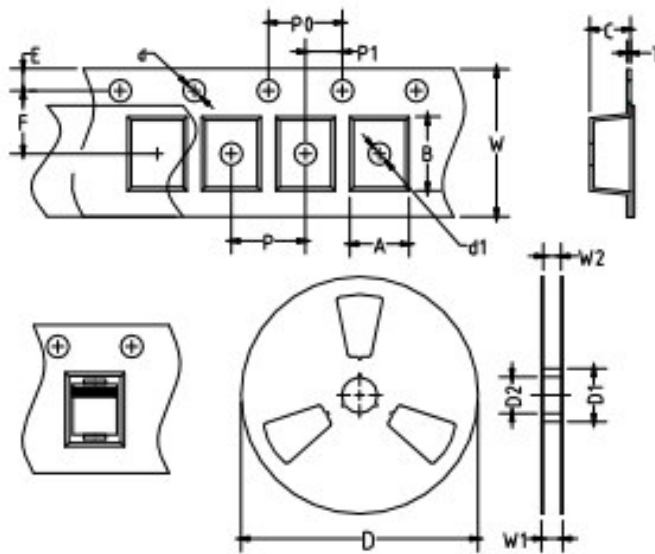


V_F Instantaneous Forward Voltage (V)

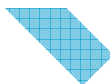
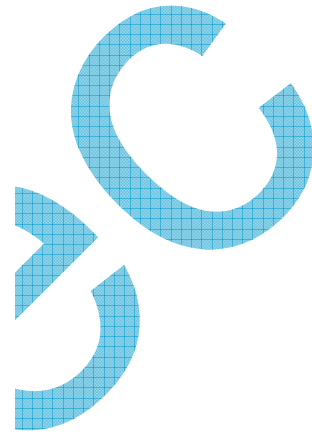
MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



Size (Unit:mm)

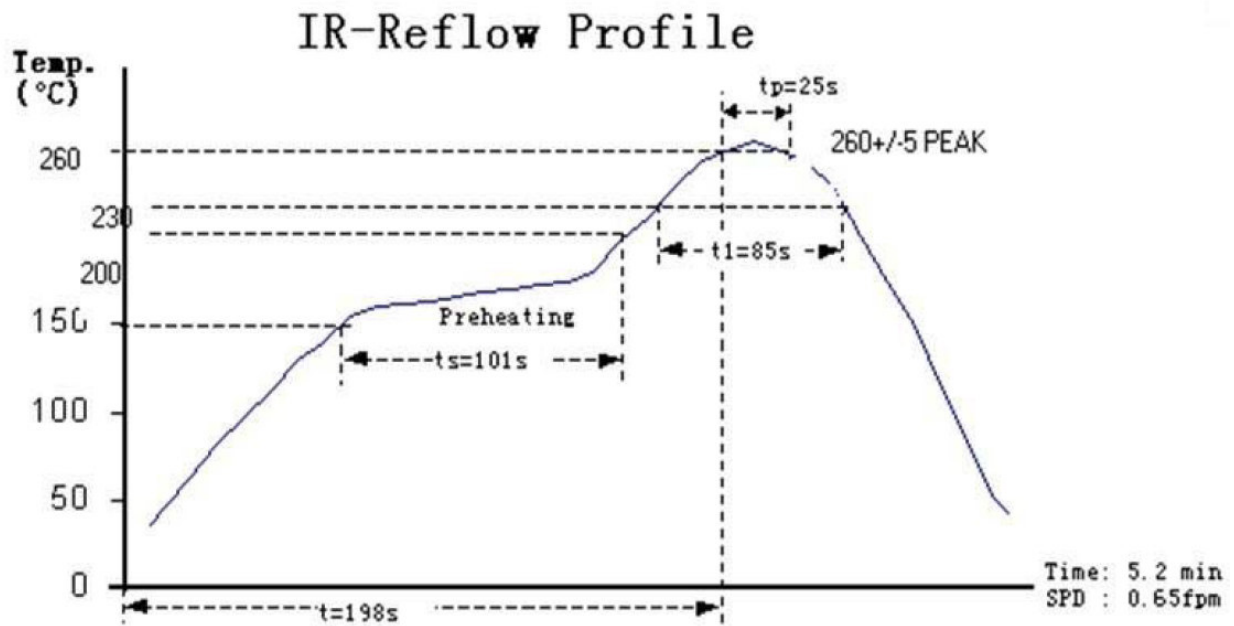


Item	Symbol	SMC
Carrier width	A	6.00±0.10
Carrier length	B	8.31±0.10
Carrier depth	C	2.54±0.10
Sprocket hole	d	1.50±0.10
Carrier hole	d1	1.50±0.10
Reel outside diameter	D	330.0±1.0
Reel inner diameter	D1	75±1.0
Feed hole diameter	D2	13.5±1.0
Sprocket hole position	E	1.75±0.10
Punch hole position	F	7.50±0.10
Punch hole pitch	P	8.00±0.10
Sprocket hole pitch	P0	4.00±0.10
Embossment center	P1	2.00±0.10
Total tape thickness	T	0.25±0.10
Tape width	W	16.10±0.30
Reel width	W1	22.7±1.5
Reel width	W2	18.1±1.0



SMC

Lead Free Reflow Soldering Profile



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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 0-35°C and a relative humidity 35-75%RH

Published by FrelTec® GmbH
Mathildenstr. 10A; 82319 Starnberg; Germany
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