

ES1A THRU ES1K

Surface Mount Super Fast Recovery Rectifier

Essential information; basic information

Features

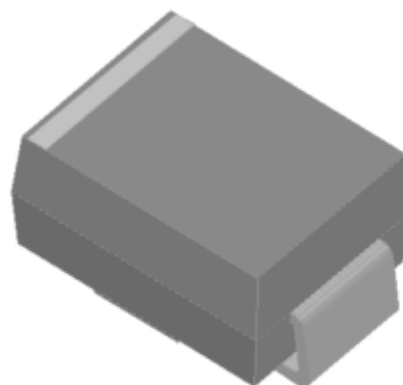
- Low profile package
- Glass passivated chip junction
- Super Fast reverse recovery time
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Typical Applications

For use in high frequency of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

Mechanical Data

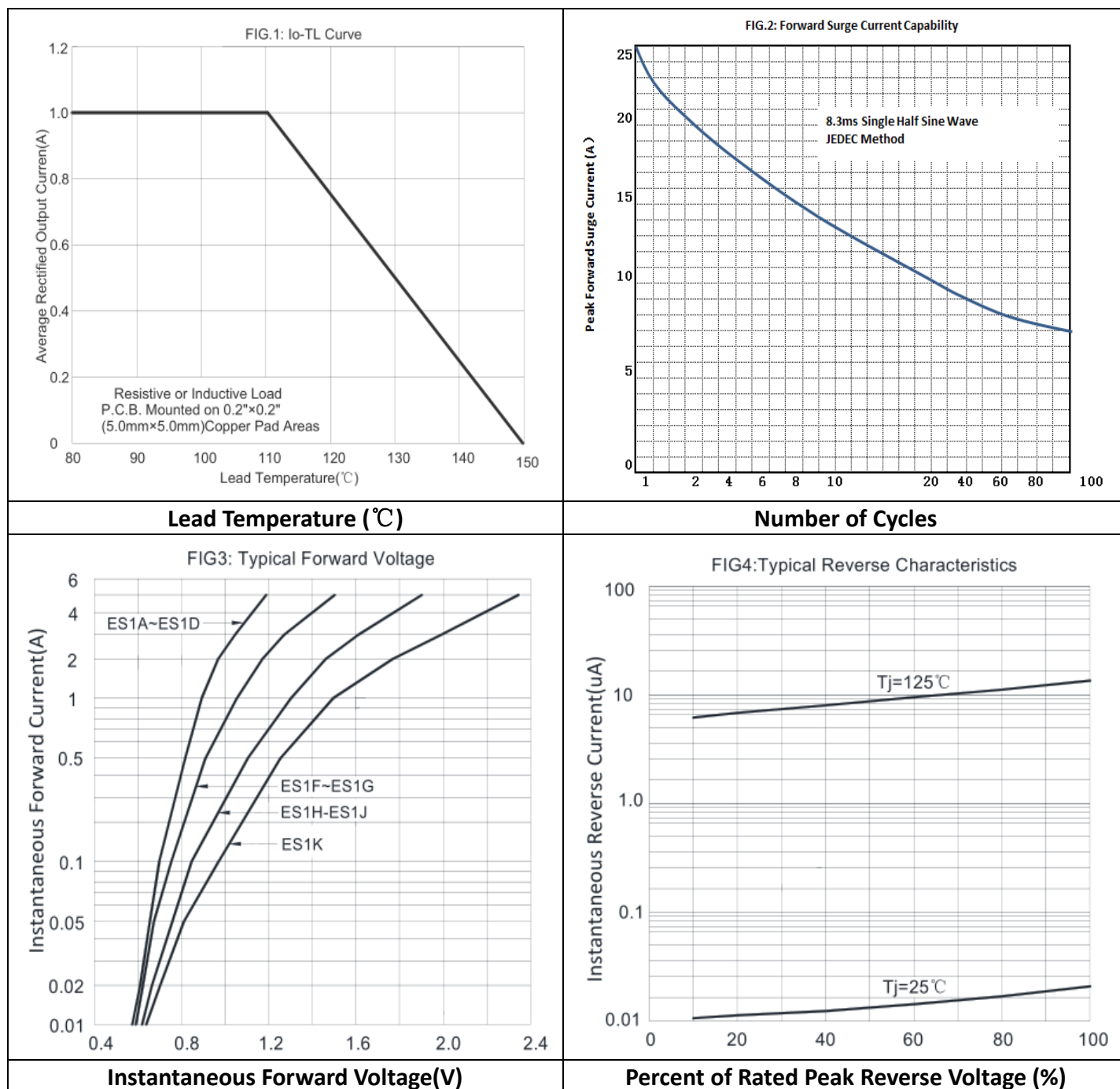
- Package: DO-214AC (SMA)
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Cathode line denotes the cathode end



Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	ES1A	ES1B	ES1D	ES1G	ES1H	ES1J	ES1K
Maximum Repetitive peak reverse voltage	VRRM	V	50	100	200	400	500	600	800
Maximum RMS Voltage	VRMS	V	35	70	140	280	350	420	560
Maximum DC Blocking Voltage	VDC	V	50	100	200	400	500	600	800
AverageRectifiedOutputCurrent@60Hz sine wave, resistance load, TL (Fig.1)	IO	A	1.0						
ForwardSurgeCurrent(Non-repetitive) @60Hz Half-sine wave,1 cycle,Tj=25℃	IFSM	A	25						
Storage temperature	Tstg	℃	-55 ~ +150						
Junction temperature	Tj	℃	-55 ~ +150						
Maximum instantaneous forward voltage drop per diode	VF（IFM=1.0A）	V	1.0			1.3	1.7		1.85
Maximum reverse recovery time	Trr ns	IF=0.5A, IR=1.0A, Irr=0.25A	35						
Maximum DC reverse current at rated DC blocking voltage per diode	IR（Tj =25℃）	μ A	5						
	IR（Tj =125℃）		100						

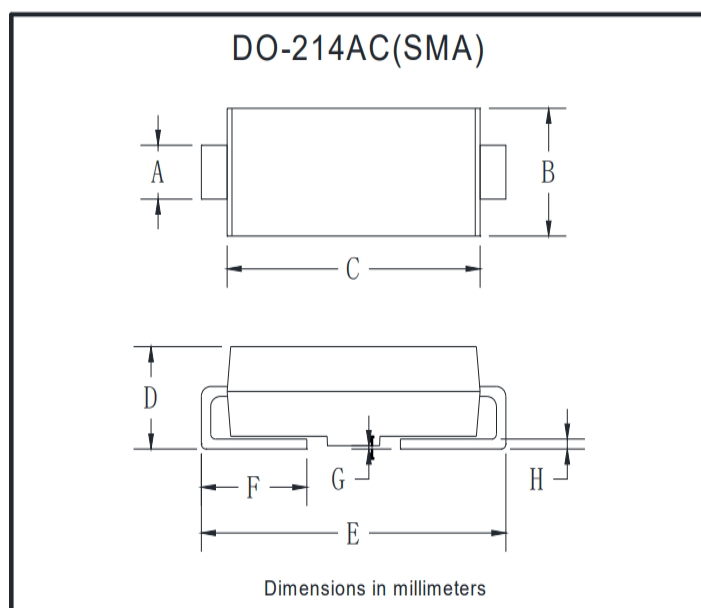
Characteristics (Typical)



Ordering Information (Example)

type specification	manner of packin	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ES1A-ES1K (SMA)	T/B	2000	10000	100000	7" reel
		5000	10000	100000	11" reel
		5000	10000	100000	13" reel

Outline Dimensions



DO-214AC(SMA)		
Dim	Min	Max
A	1.25	1.58
B	2.40	2.83
C	4.06	4.75
D	1.90	2.30
E	4.93	5.28
F	0.76	1.41
G	0.08	0.20
H	0.15	0.31

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