

Features

- Guardring for overvoltage protection
- High forward surge current capability
- Low VF
- Metal silicon junction, majority carrier conduction
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Reverse Voltage

40-100 V

Forward Current

2 Ampere

DO-214AC(SMA)

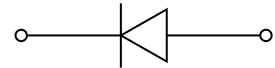
Applications

For use in high frequency rectification and freewheeling application in switching mode converters and inverters for consumer, computer, automotive, and telecommunication.



Mechanical Data

- Case: DO-214AC(SMA)
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end



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

PARAMETER	SYMBOL	UNIT	SSL24	SSL26	SSL210
Device marking code			SSL24	SSL26	SSL210
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	40	60	100
Maximum RMS Voltage	V_{RMS}	V	28	42	70
Maximum DC blocking Voltage	V_{DC}	V	40	60	100
Maximum Average Forward Rectified Current @60Hz sine wave, Resistance load, TL (Fig.1)	$I_{F(AV)}$	A	2.0		
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I_{FSM}	A	50		
Storage temperature	T_{stg}	°C	-55 ~ +150		
Junction temperature	T_j	°C	-55 ~ +125		-55 ~ +150
Typical Thermal Resistance	$R_{\theta J-A}$	°C /W	80		
	$R_{\theta J-L}$	°C /W	25		

Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	SSL24	SSL26	SSL210
Maximum instantaneous forward voltage	$I_F=2.0\text{A}$	V_F	V	0.55	0.7	0.85
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}$, $T_A=25^\circ\text{C}$	I_{R1}	mA	0.5		0.05
	$V_R=V_{DC}$, $T_A=100^\circ\text{C}$	I_{R2}		50		10
Typical junction capacitance	4.0V DC, 1MHz	C_J	pF	290	130	110

Ratings And Characteristics Curves ($T_a=25^\circ\text{C}$ Unless otherwise specified)

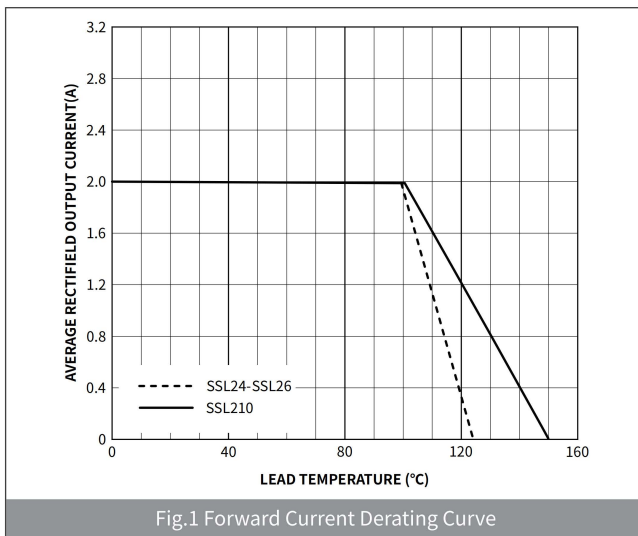


Fig.1 Forward Current Derating Curve

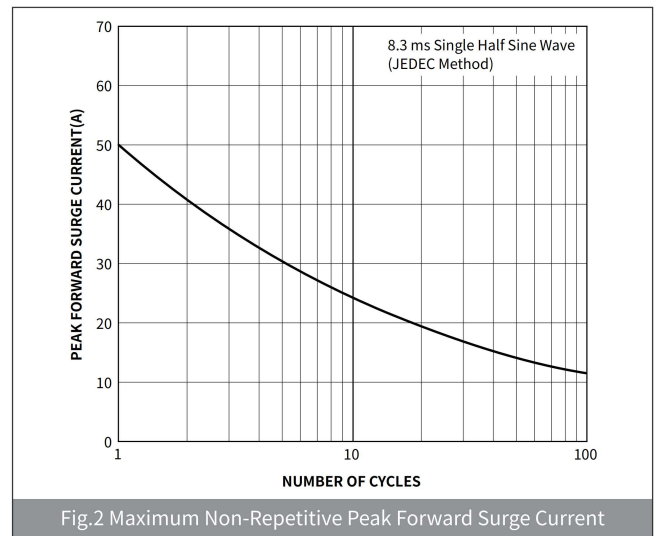


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

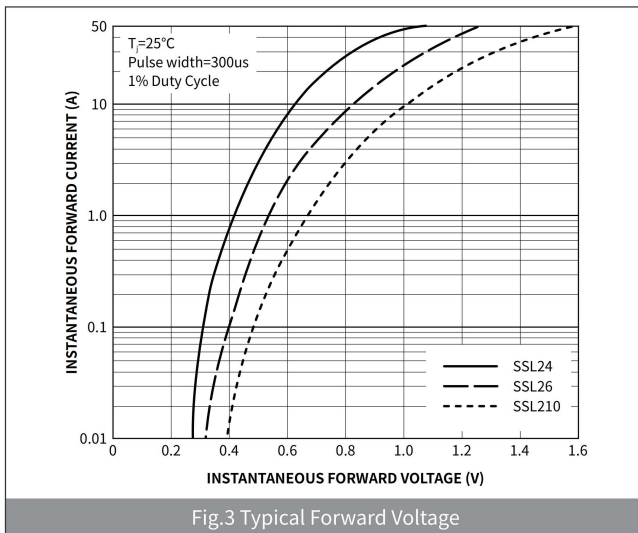


Fig.3 Typical Forward Voltage

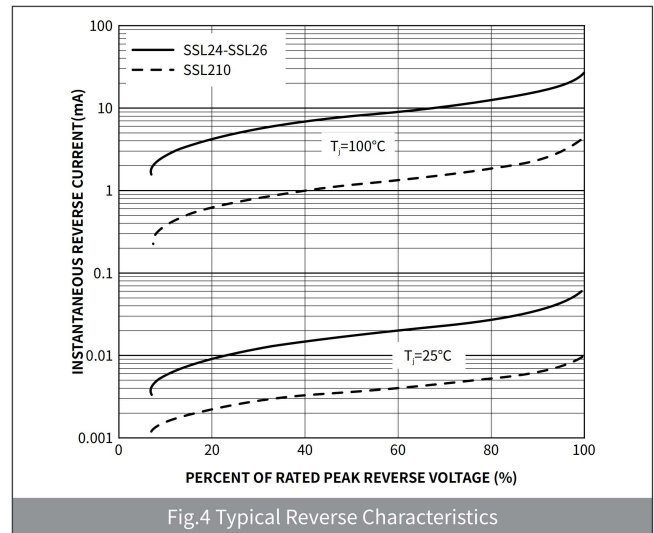


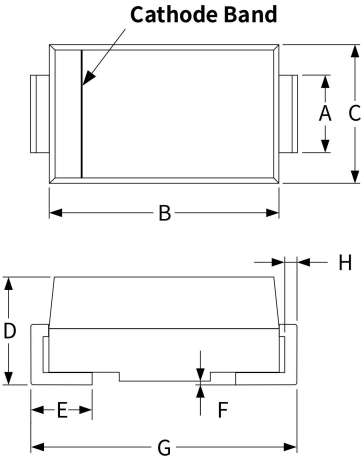
Fig.4 Typical Reverse Characteristics

Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SMA	R2	0.07	5000	10000	80000	11"
SMA	R3	0.07	7500	15000	120000	13"

Package Outline Dimensions (SMA/DO-214AC)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.25	1.65	0.049	0.065
B	3.95	4.65	0.156	0.183
C	2.35	2.85	0.093	0.112
D	1.98	2.41	0.078	0.095
E	0.76	1.52	0.030	0.060
F	-	0.203	-	0.008
G	4.70	5.30	0.185	0.209
H	0.15	0.31	0.006	0.012



Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
M	1.70	-	0.067	-
J	2.10	-	0.082	-
K	-	2.30	-	0.090

