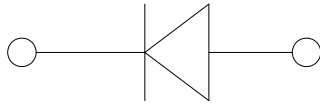


Surface Mount Schottky Rectifier



Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- Low V_F
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.

Mechanical Data

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

■Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SSL14A	SSL16A	SSL110A
Device marking code			SSL14A	SSL16A	SSL110A
Repetitive peak reverse voltage	V_{RRM}	V	40	60	100
Average rectified output current @60Hz sine wave, resistance load, TL (FIG.1)	I_O	A	1.0		
Surge(non-repetitive)forward current @ 60Hz half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	I_{FSM}	A	28		
Storage temperature	T_{stg}	$^\circ\text{C}$	-55 ~+150		
Junction temperature	T_j	$^\circ\text{C}$	-55 ~+150		

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SSL14A	SSL16A	SSL110A
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=1.0\text{A}$	0.45	0.55	0.6
Maximum DC reverse current at rated DC blocking voltage per diode@ $V_{RM}=V_{RRM}$	I_{RRM}	mA	$T_a=25^\circ\text{C}$	0.5		
			$T_a=100^\circ\text{C}$	10		

Note1:Pulse test:300uS pulse width,1% duty cycle

Note2:Pulse test:pulse width 40mS

SSL14A THRU SSL110A

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SSL14A	SSL16A	SSL110A
Thermal resistance	R _{θJ-A}	°C/W	60 ⁽¹⁾		
	R _{θJ-L}		25 ⁽¹⁾		

Note

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

■ Characteristics (Typical)

FIG1: I_o-T_L Curve

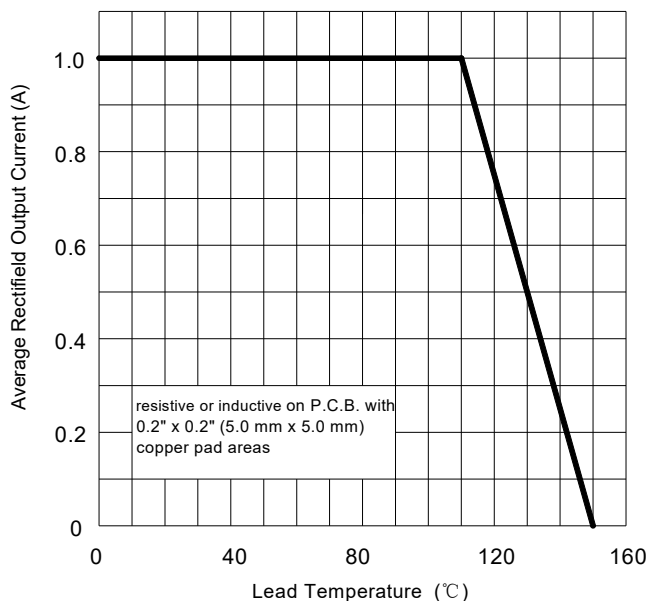


FIG2: Surge Forward Current Capability

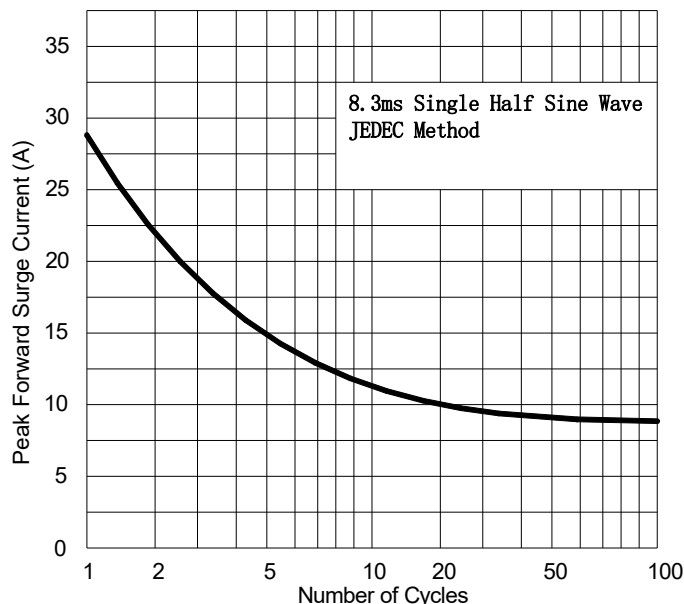


FIG3: Forward Voltage

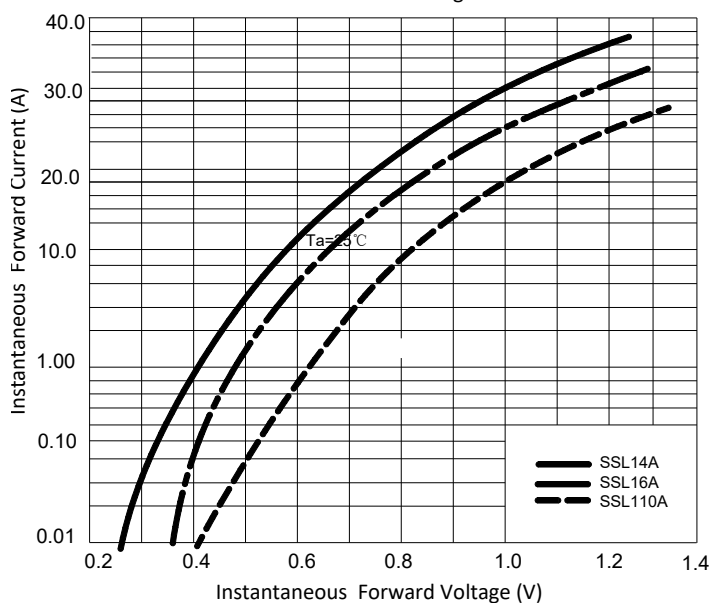
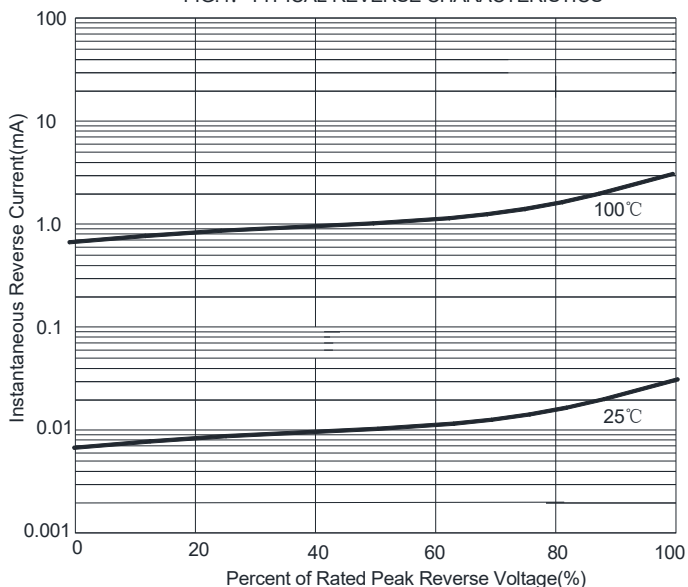


FIG4: TYPICAL REVERSE CHARACTERISTICS

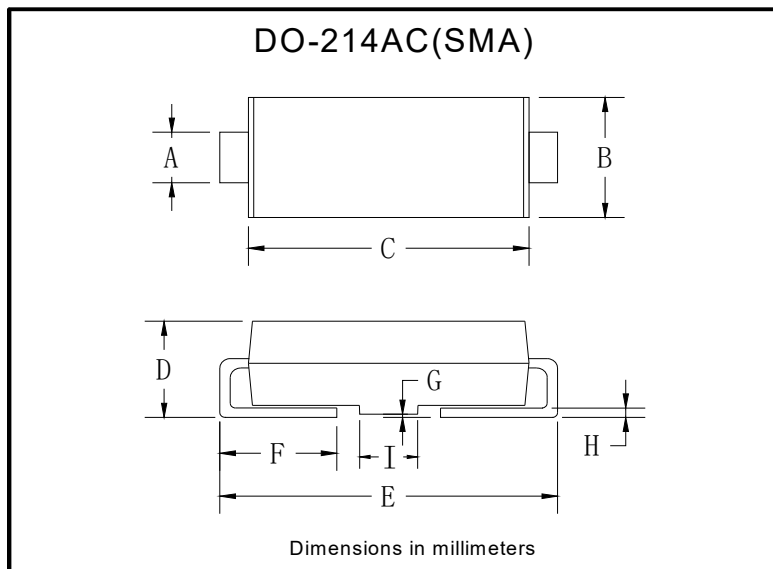


SSL14A THRU SSL110A

■ Ordering Information (Example)

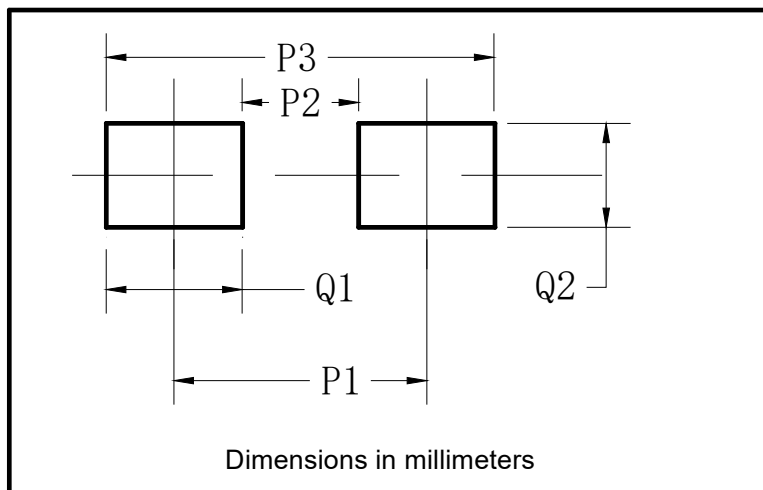
PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SSL14A-SSL110A	F1	Approximate 0.059	5000	/	80000	13" reel
SSL14A-SSL110A	F2	Approximate 0.059	7500	/	120000	13" reel
SSL14A-SSL110A	F3	Approximate 0.059	7500	/	60000	13" reel
SSL14A-SSL110A	F4	Approximate 0.059	1800	7200	57600	7" reel
SSL14A-SSL110A	F5	Approximate 0.059	2000	8000	64000	7" reel
SSL14A-SSL110A	F6	Approximate 0.059	5000	/	100000	13" reel

■ Outline Dimensions



DO-214AC(SMA)		
Dim	Min	Max
A	1.25	1.58
B	2.40	2.83
C	4.00	4.75
D	1.90	2.30
E	4.93	5.28
F	0.76	1.41
G	0.05	0.20
H	0.15	0.31
I	1.70	2.10

■ Suggested Pad Layout



DO-214AC(SMA)	
Dim	Millimeters
P1	4.00
P2	1.50
P3	6.50
Q1	2.50
Q2	1.70

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