

■ **FEATURES**

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- Low VF
- 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, RoHS-compliant, halogen-free
- **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	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, Ta=25°C	I _{FSM}	A	28		
Storage temperature	T _{stg}	°C	-55 ~+150		
Junction temperature	T _j	°C	-55 ~+150		

■ **ELECTRICAL CHARACTERISTICS** (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SSL14A	SSL16A	SSL110A
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =1.0A	0.4	0.55	0.6
Maximum DC reverse current at rated DC blocking voltage per diode @ V _{RM} =V _{RRM}	I _{RRM}	mA	Ta=25°C	0.5		
			Ta=100°C	10		

■ **THERMAL CHARACTERISTICS** (Ta=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: Io-TL Curve

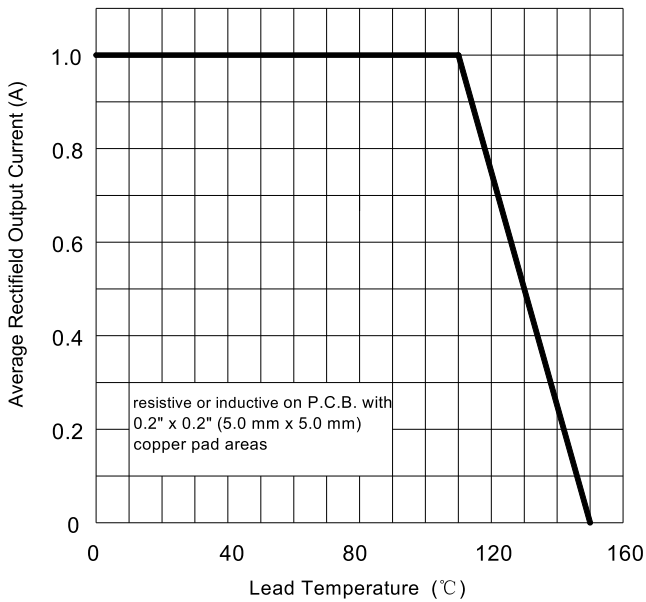


FIG2: Surge Forward Current Capability

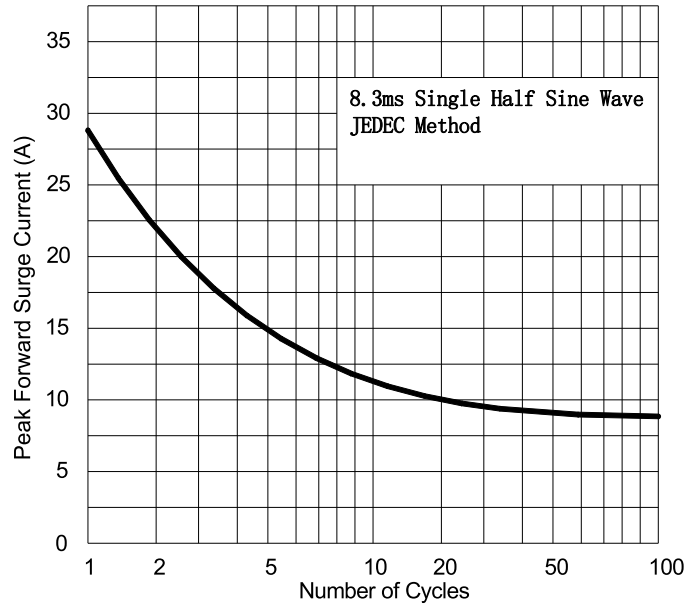


FIG3: Forward Voltage

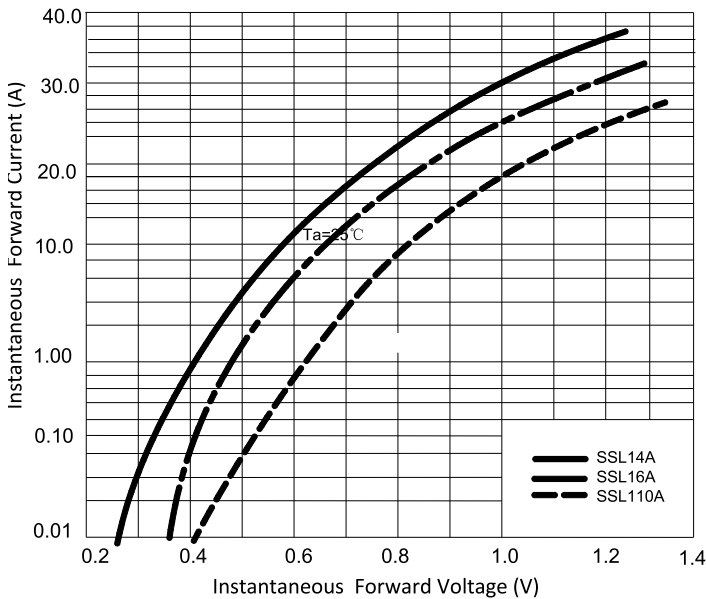
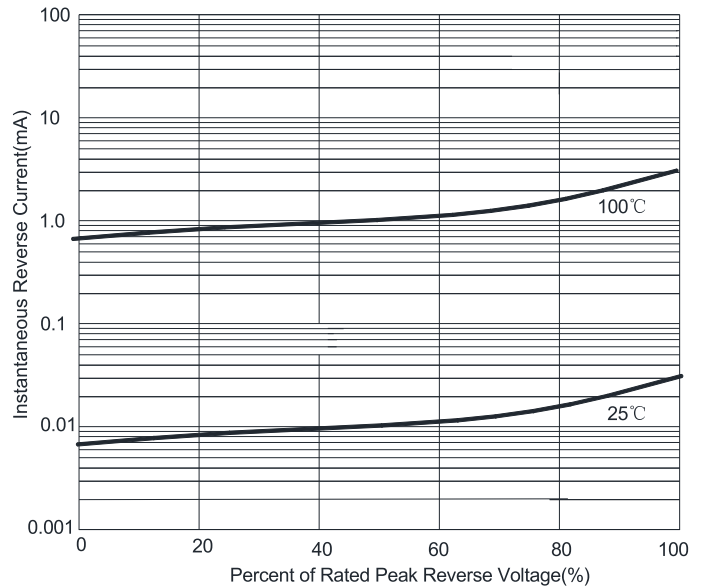


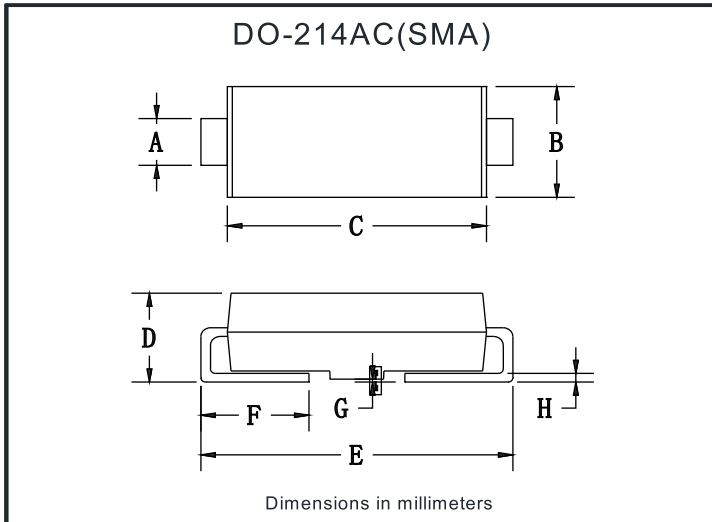
FIG4: TYPICAL REVERSE CHARACTERISTICS



PACKAGING INFORMATION

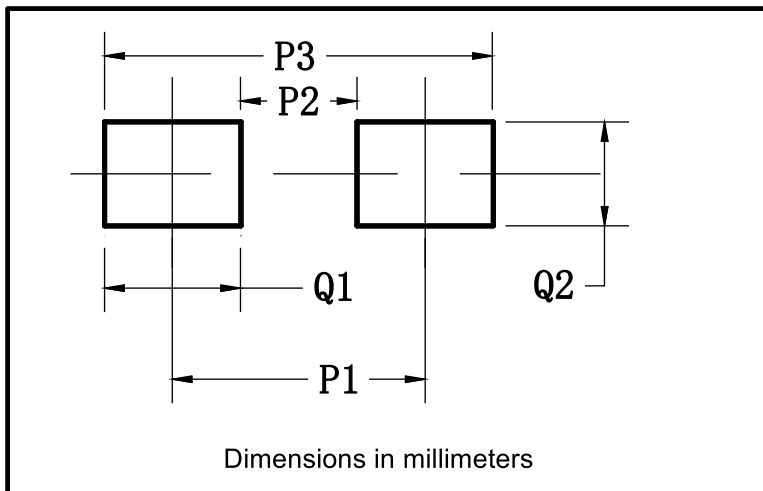
PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SSL14A-SSL110A	F1	Approximate 0.059	5000	10000	80000	13" reel
SSL14A-SSL110A	F2	Approximate 0.059	7500	15000	120000	13" reel
SSL14A-SSL110A	F3	Approximate 0.059	7500	15000	60000	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	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

■ **SUGGESTED PAD LAYOUT**



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