

■ FEATURES

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- 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 (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS								
			22A	23A	24A	25A	26A	28A	210A	215A	220A
Device marking code			SS								
Repetitive Peak Reverse Voltage	V _{RRM}	V	20	30	40	50	60	80	100	150	200
Average Rectified Output Current @60Hz Half-sine wave, Resistance load, TL (FIG.1)	I _o	A	2.0								
Surge(Non-repetitive)Forward Current @60Hz Half-sine wave, 1 cycle, T _a =25°C	I _{FSM}	A	50								
Junction Temperature	T _j	°C	-55~+125				-55 ~+150				
Storage Temperature	T _{sig}	°C	-55 ~+150								

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS							
				22A	23A	24A	25A	26A	28A	210A	215A
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =2.0A	0.50			0.70		0.85		0.90
Maximum DC reverse current at rated DC blocking voltage per diode@ V _{RM} =V _{RRM}	I _{RRM}	mA	T _a =25°C	0.50				0.10			
			T _a =100°C	10				5			

■ THERMAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS							
			22A	23A	24A	25A	26A	28A	210A	215A
Thermal Resistance	R _{θJ-A} ⁽¹⁾	°C/W	75							
	R _{θJ-L} ⁽¹⁾		17							

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

PACKAGING INFORMATION

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS22A- SS220A	F1	Approximate 0.059	5000	10000	80000	13" reel
SS22A- SS220A	F2	Approximate 0.059	7500	15000	120000	13" reel
SS22A- SS220A	F3	Approximate 0.059	7500	15000	60000	13" reel
SS22A- SS220A	F4	Approximate 0.059	1800	7200	57600	7" reel
SS22A- SS220A	F5	Approximate 0.059	2000	8000	64000	7" reel
SS22A- SS220A	F6	Approximate 0.059	5000	10000	100000	13" reel

CHARACTERISTICS (TYPICAL)

FIG1: I_o -TL Curve

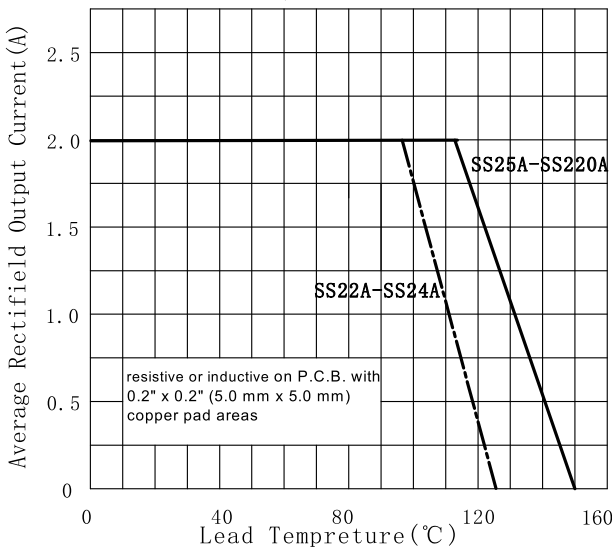


FIG2: Surge Forward Current Capability

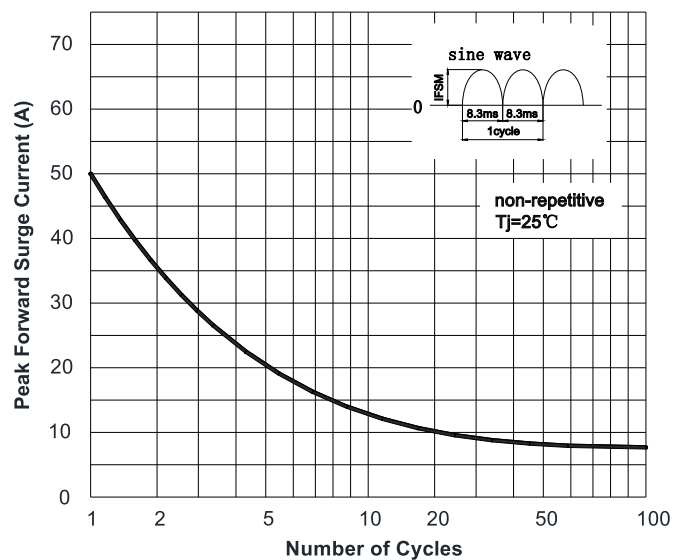


FIG3: Forward Voltage

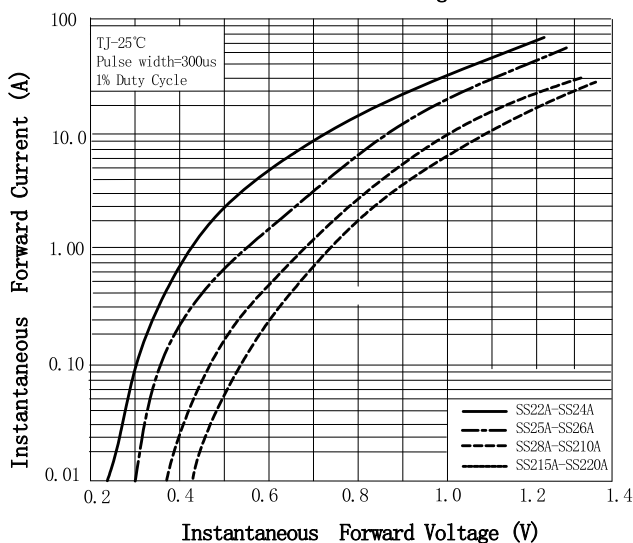
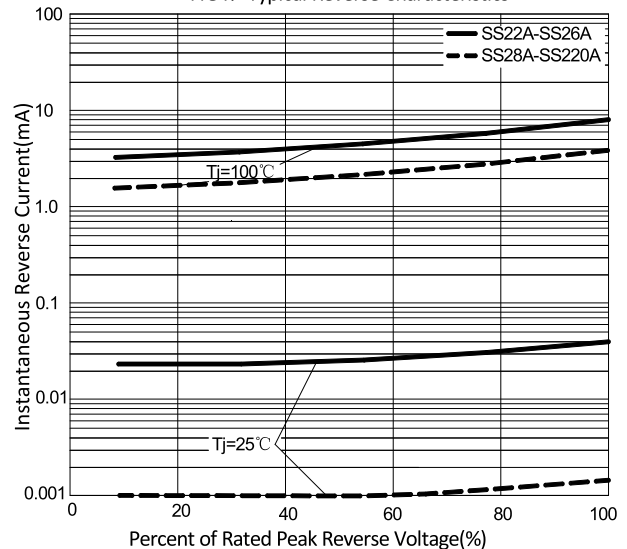
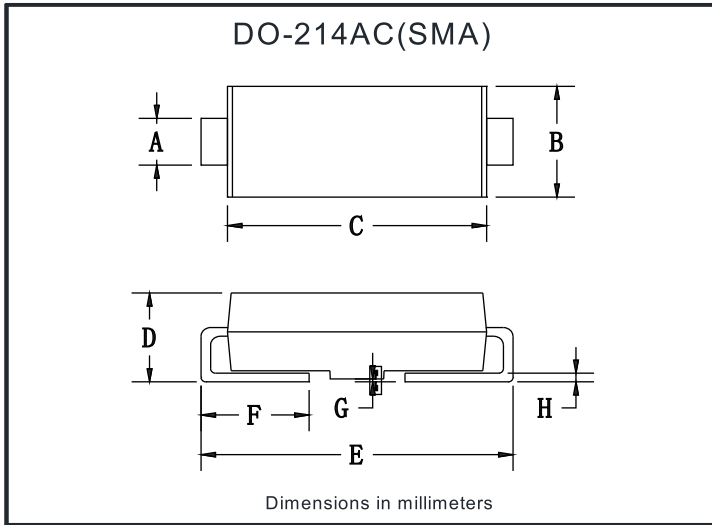


FIG4: Typical Reverse Characteristics

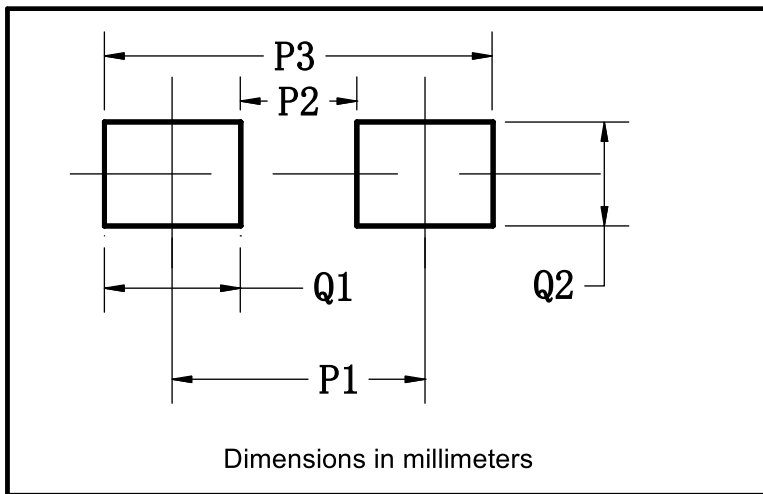


■ **OUTLINE DIMENSIONS**



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