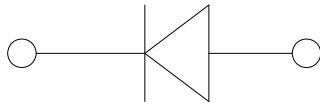
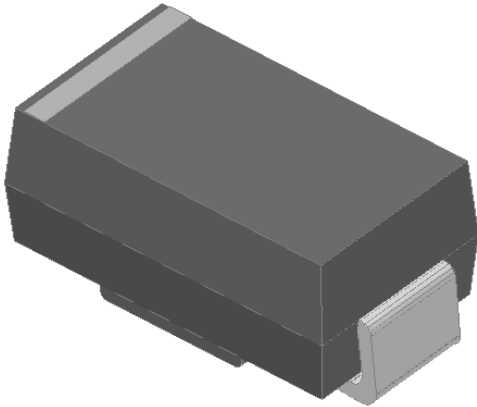


Surface Mount Schottky Rectifier



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

PARAMETER	SYMBOL	UNIT	SS310AS
Device marking code			SS310AS
Repetitive peak reverse voltage	V_{RRM}	V	100
Average rectified output current @60Hz sine wave, resistance load, TL (FIG.1)	I_o	A	3.0
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	I_{FSM}	A	65
Storage temperature	T_{stg}	$^\circ\text{C}$	-55 ~+175
Junction temperature	T_j	$^\circ\text{C}$	-55 ~+175

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS310AS
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=3.0\text{A}$	0.85
Breakdown Voltage	V_R	V	$I_R=0.05\text{mA}$	100
Maximum DC reverse current at rated DC blocking voltage per diode@ $V_{RM}=V_{RRM}$	I_{RRM}	mA	$T_a=25^\circ\text{C}$	0.10
			$T_a=100^\circ\text{C}$	5.0

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

Note2:Pulse test:pulse width 40mS



SS310AS

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

PARAMETER	SYMBOL	UNIT	SS310AS
Thermal resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	80
	$R_{\theta J-L}$		20

■ Characteristics (Typical)

FIG1: I_o -TL Curve

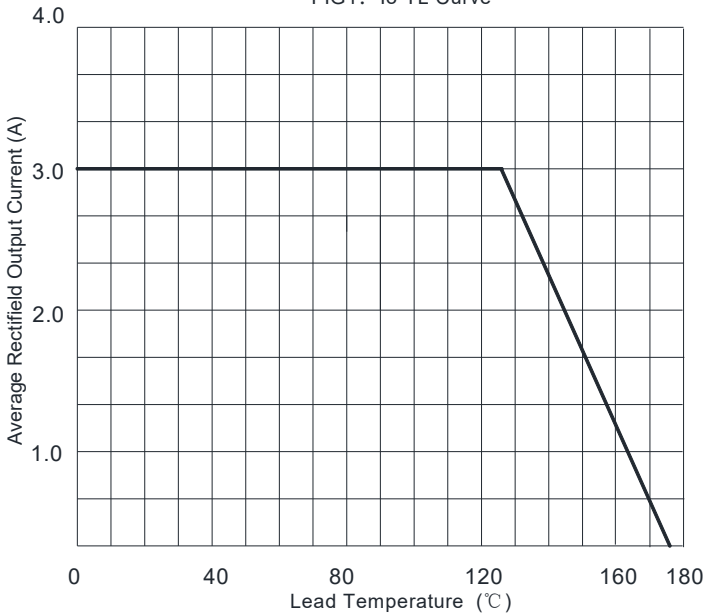


FIG2: Surge Forward Current Capability

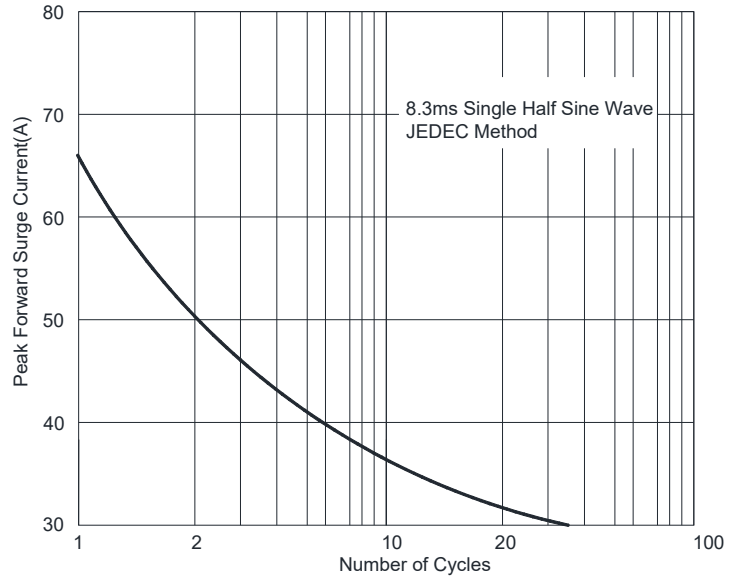


FIG3: TYPICAL FORWARD CHARACTERISTICS

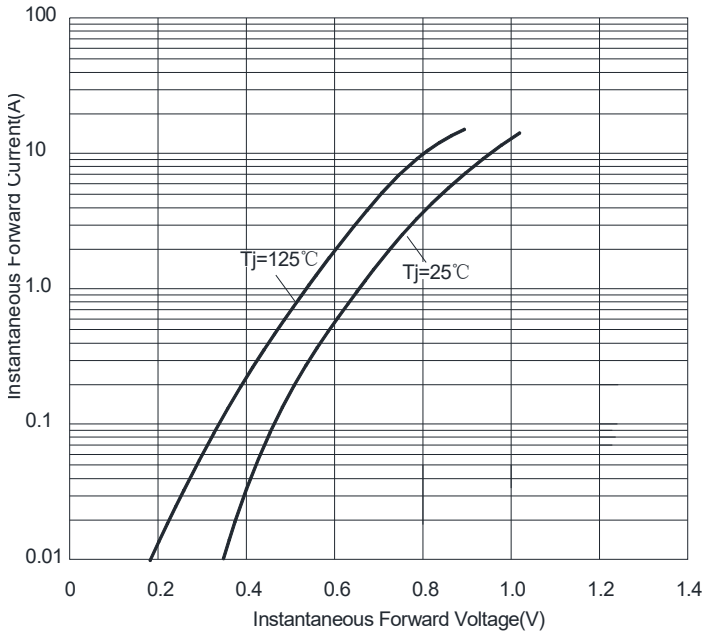
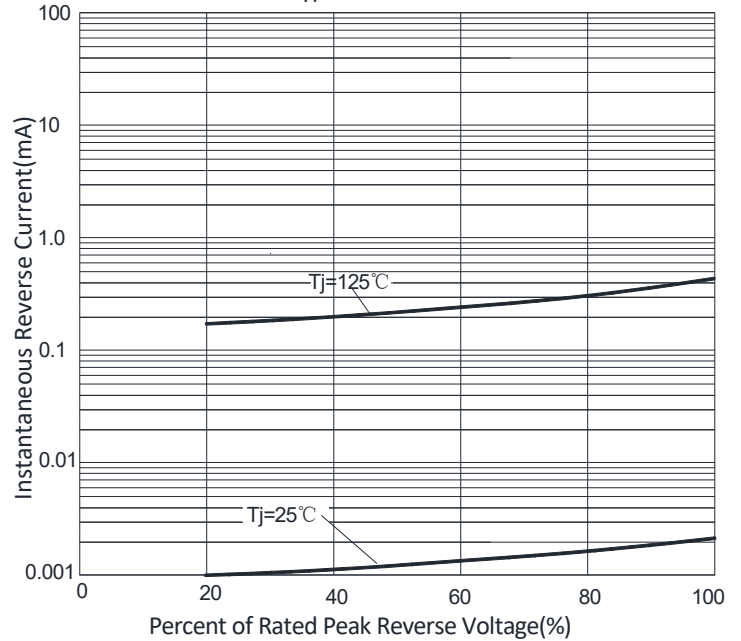


FIG4: Typical Reverse Characteristics



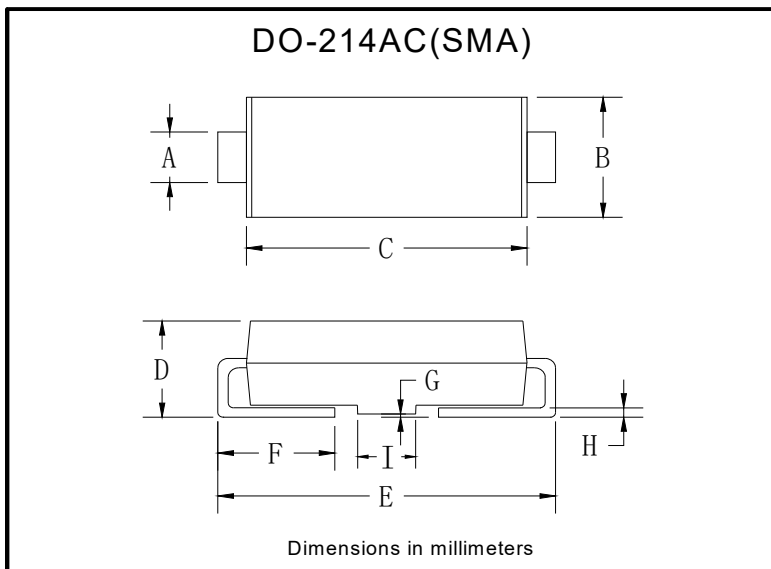


SS310AS

■ Ordering Information (Example)

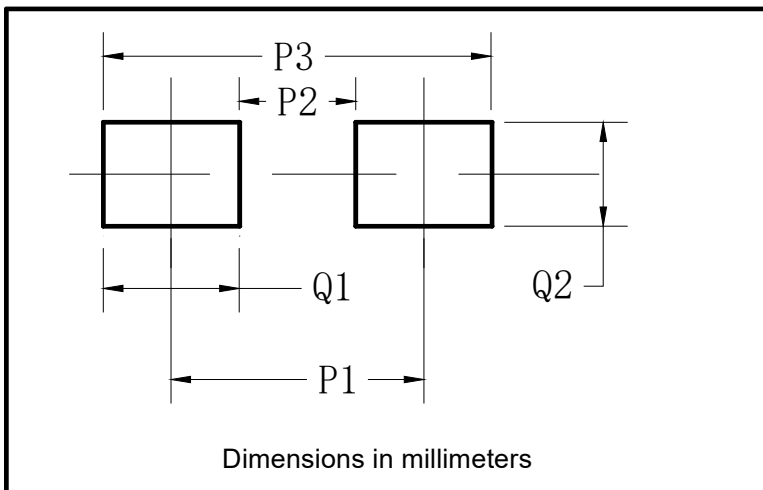
PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS310AS	F1	Approximate 0.059	5000	/	80000	13" reel
SS310AS	F2	Approximate 0.059	7500	/	120000	13" reel
SS310AS	F3	Approximate 0.059	7500	/	60000	13" reel
SS310AS	F4	Approximate 0.059	1800	7200	57600	7" reel
SS310AS	F5	Approximate 0.059	2000	8000	64000	7" reel
SS310AS	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



SS310AS

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