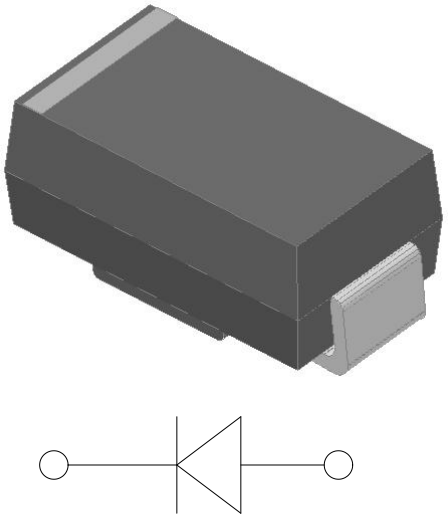
Surface Mount Schottky Rectifier



Features

- Low profile package
- Ideal for automated placement
- 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 (Tj=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS24AT
Device marking code			SS24AT
Repetitive Peak Reverse Voltage	V_{RRM}	V	40
Maximum RMS Voltage	V_{RMS}	V	28
Maximum DC Blocking Voltage	V_{DC}	V	40
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, Tj=25℃	I_{FSM}	A	50
Junction Temperature	Tj	℃	-55~+150
Storage Temperature	T_{stg}	℃	-55 ~+150
Typical Junction capacitance @4V,1MHz	Cj	pF	106

■Electrical Characteristics (Tj=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS24AT
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=2.0A	0.55
Maximum DC reverse current at rated DC blocking voltage per diode@ $V_{RM}=V_{RRM}$	I_{RRM}	mA	Tj=25℃	0.50
			Tj=125℃	10

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

Note2:Pulse test:pulse widh 40mS

■Thermal Characteristics （Ta=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	SS24AT
Thermal Resistance	$R_{\theta J-A}$	℃/W	75
	$R_{\theta J-L}$		23

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS24AT	F1	Approximate 0.059	5000	/	80000	13” reel
SS24AT	F2	Approximate 0.059	7500	/	120000	13” reel
SS24AT	F3	Approximate 0.059	7500	/	60000	13” reel
SS24AT	F4	Approximate 0.059	1800	7200	57600	7” reel
SS24AT	F5	Approximate 0.059	2000	8000	64000	7” reel
SS24AT	F6	Approximate 0.059	5000	/	100000	13” reel

■ Characteristics (Typical)

FIG1：Io-TL Curve

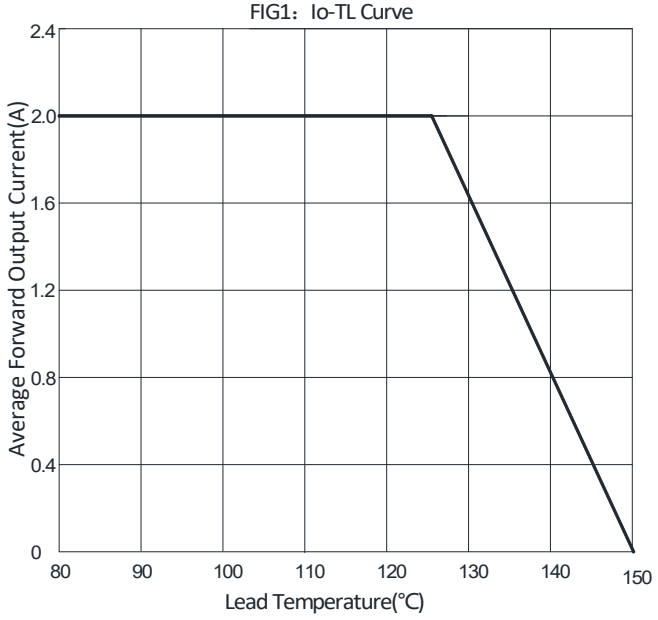


FIG2：Surge Forward Current Capability

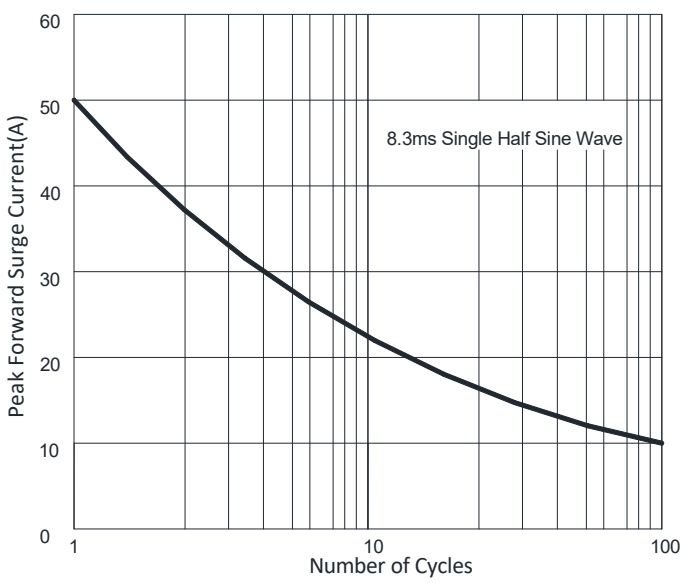


FIG3: Forward Voltage

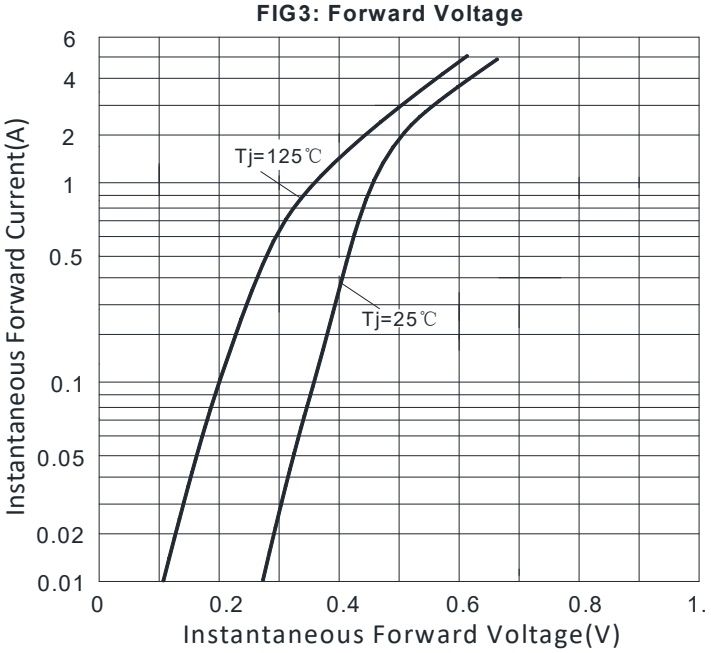
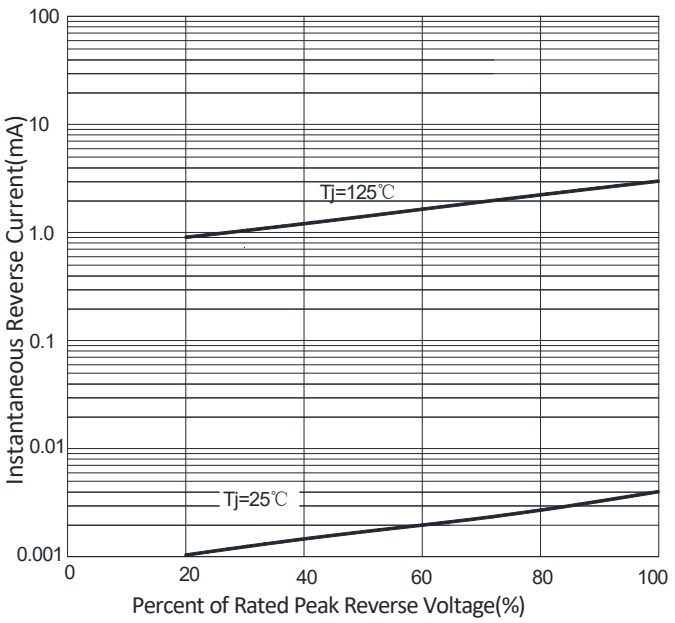
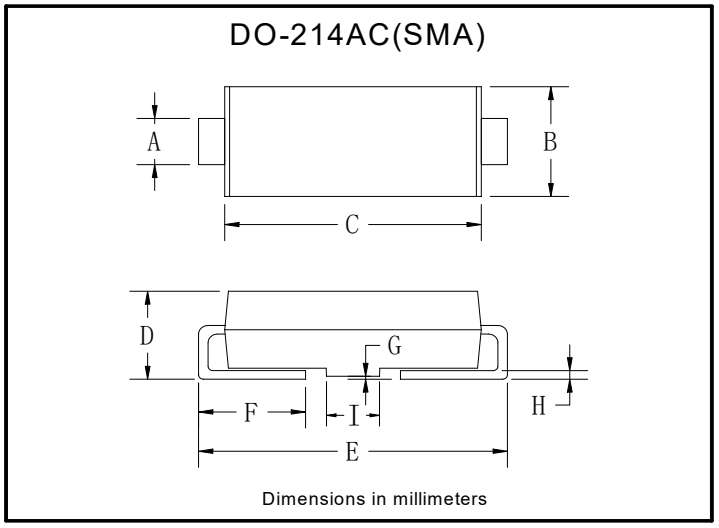


FIG4: Instantaneous Reverse Characteristics

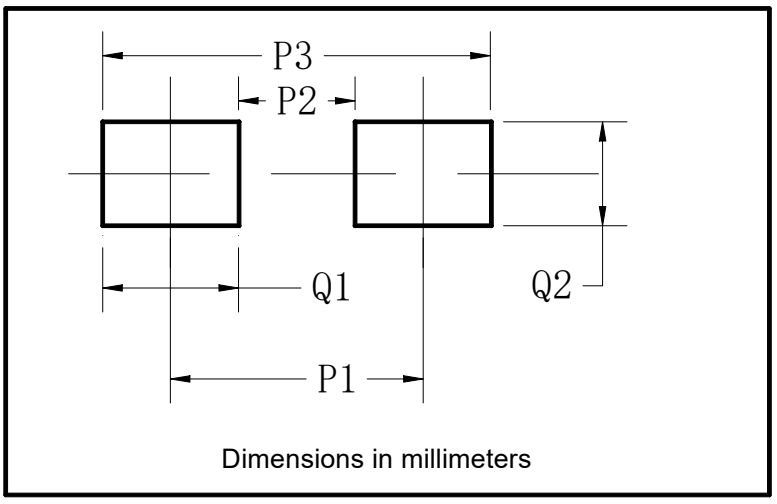


■ Outline Dimensions



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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