Technical Data
Data Sheet N1616, Rev. -

Green Products

ST5100SAX SCHOTTKY RECTIFIER

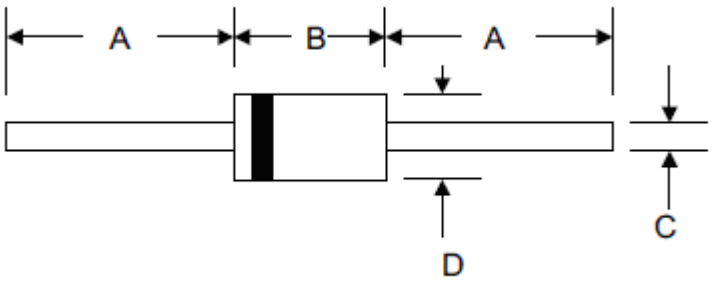
Applications:

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection
- Disk drives
- Battery charging

Features:

- Ultralow forward voltage drop
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- This is a Pb − Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Dimensions: In mm/Inches



	DO-201AE			
Dim	Min	Max	Min	Max
A	25.4	-	1.000	-
B	7.20	9.50	0.283	0.374
C	0.94	1.07	0.037	0.042
D	4.80	5.30	0.189	0.209
All	In mm		In inch	

DO-201AE

Marking Diagram:



Where XXXXX is YYWWL

ST = Device Type
5 = Forward Current (5A)
100 = Reverse Voltage (100V)
SAX = SAX
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions：Molding resin
Epoxy resin UL:94V-0

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	ST5100SAX	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Average Rectified Output Current (Note 1) @T_A = 105°C	$I_{F(AV)}$	5.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80	A
Forward Voltage @I_F = 2.0A,T_A = 25°C @I_F = 5.0A,T_A = 25°C @I_F = 2.0A,T_A = 125°C @I_F = 5.0A,T_A = 125°C	V_{FM}	0.60 0.80 0.55 0.67	V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	0.1 15	mA
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	25	K/W
Storage Temperature Range	T_J ,T_{STG}	-55 to +150	°C
Case Style	DO-201AE		

Note:1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

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