

#### **Surface Mount Schottky Barrier Rectifier**

Reverse Voltage - 45V

Forward Current - 3 A

#### **FEATURES**

- ♦Metal silicon junction, majority carrier conduction
- For surface mounted applications
- **♦Low power loss, high efficiency**
- High forward surge current capability
- For use in low voltage, high frequency inverters,

free wheeling, and polarity protection applications

Lead free in comply with EU RoHS 2011/65/EU directives

#### **MECHANICAL DATA**

♦Case: DO-214AC/SMA

♦Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.07g /0.002oz

# **Pinning**



Marking Code		
SSL345	YFW SSL345	

#### **Absolute Maximum Ratings and Electrical characteristics**

Ratings at 25  $^{\circ}$  ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20  $^{\circ}$ 

Parameter	Symbols	SSL345	Units
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	45	v
Maximum RMS voltage	V <sub>RMS</sub>	32	v
Maximum DC Blocking Voltage	<b>V</b> <sub>DC</sub>	45	v
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	3.0	Α
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	Ifsм	80	Α
Maximum Instantaneous Forward Voltage at 3 A	V <sub>F</sub>	0.45	V
Maximum Instantaneous Reverse Current T <sub>A</sub> = 25°C at Rated DC Reverse Voltage T <sub>A</sub> = 100°C	<b>I</b> R	0.3 5	mA
Typical Junction Capacitance (1)	C <sub>j</sub>	450	pF
Typical Thermal Resistance (2)	Reja	60	°C/W
Operating Junction Temperature Range	Tj	-55 ~ <b>+</b> 150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ <b>+</b> 150	°C

<sup>(1)</sup> Measured at 1 MHz and applied reverse voltage of 4 V D.C

Rev:BD09

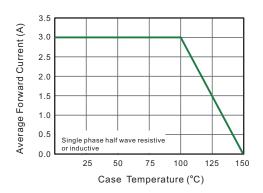
<sup>(2)</sup> P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

100



## **Ratings And Characteristic Curves**

Fig.1 Forward Current Derating Curve



Instaneous Reverse Current (µA) 100 40 60

10

102

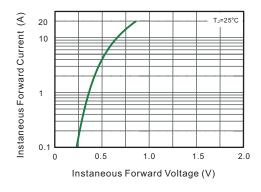
10<sup>1</sup>

Fig.2 Typical Reverse Characteristics

. Γ<sub>ι</sub>=25°C

Percent of Rated Peak Reverse Voltage (%)

Fig.3 Typical Forward Characteristic



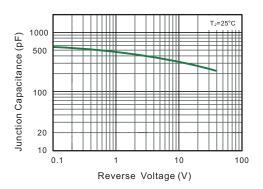


Fig.4 Typical Junction Capacitance

Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

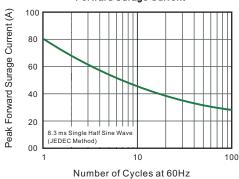
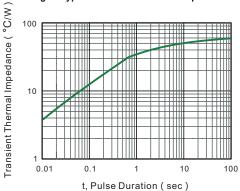
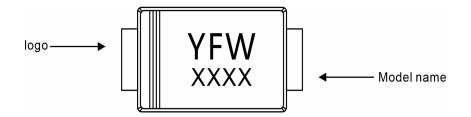


Fig.5- Typical Transient Thermal Impedance





## **Marking Diagram**

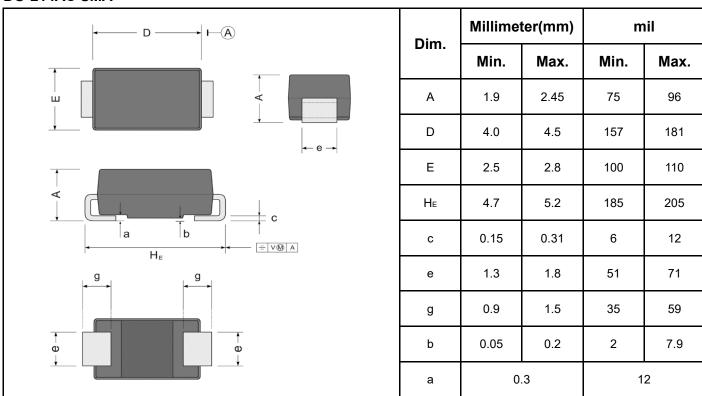


## **Ordering information**

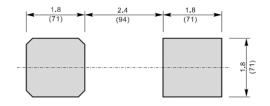
Package	Packing Description	Packing Quantity
DO-214AC SMA	Tape/Reel,13"reel	5000PCS/Reel 50000PCS/Carton
	Tape/Reel,7"reel	2000PCS/Reel 50000PCS/Carton

#### **Package Dimensions**

## DO-214AC SMA



#### The recommended mounting pad size



Unit:  $\frac{mm}{(mil)}$ 



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