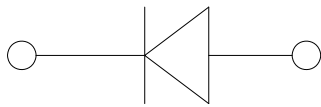


## Surface Mount Schottky Rectifier



### Features

- Guardring for overvoltage protection
- Low power loss
- Extremely fast switching
- High forward surge capability
- High frequency operation
- Solder dip 260 °C max. 10 s, per JESD 22-B106

### Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.

### Mechanical Data

- **Package:** DO-214AB (SMC)  
Molding compound meets UL 94 V-0 flammability rating, -
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes the cathode end

### ■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS845
Device marking code			SS845
Repetitive Peak Reverse Voltage	$V_{RRM}$	V	45
Average Rectified Output Current @60Hz sine wave, Resistance load, Ta (FIG.1)	$I_o$	A	8.0
Surge(Non-repetitive)Forward Current @60Hz Half-sine wave,1 cycle, Ta=25°C	$I_{FSM}$	A	120
Storage Temperature	$T_{stg}$	°C	-55 ~+150
Junction Temperature	$T_j$	°C	-55~+125

### ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS845
Maximum instantaneous forward voltage drop per diode	$V_F$	V	$I_{FM}=8.0A$	0.60
Maximum DC reverse current at rated DC blocking voltage per diode	$I_R$	mA	Ta=25°C	0.2
			Ta=100°C	20
Typical junction capacitance	$C_j$	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C.	450

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

Note2:Pulse test:pulse width 40mS

■ Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	SS845
Thermal Resistance	Between junction and ambient	R <sub>θJ-A</sub>	°C/W	45 <sup>(1)</sup>
	Between junction and lead	R <sub>θJ-L</sub>		12 <sup>(1)</sup>

Note (1)

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS845	F1	Approximate 0.254	3000	/	42000	13" reel

■ Characteristics (Typical)

FIG.1: Io-TL Curve

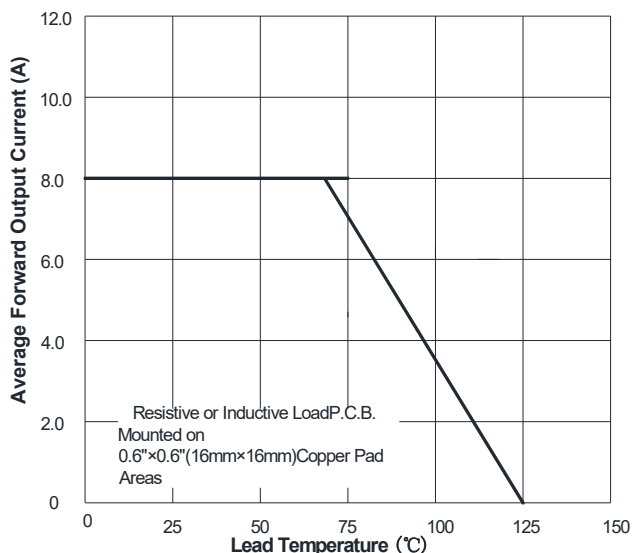


FIG.2: Forward Surge Current Capability

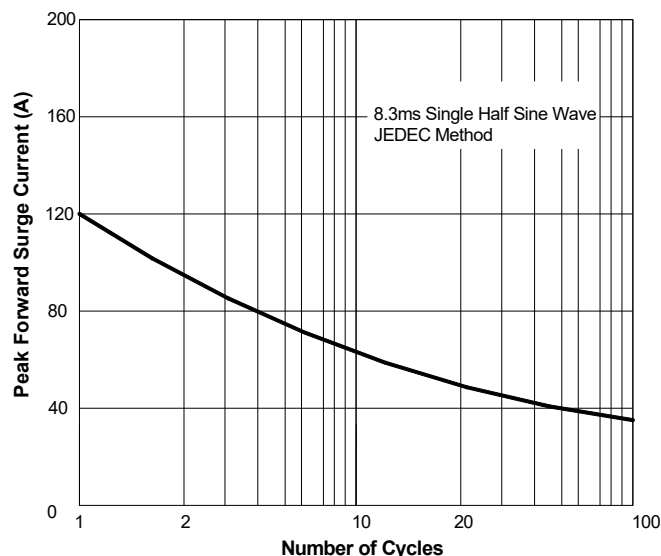


FIG.3: Forward Voltage

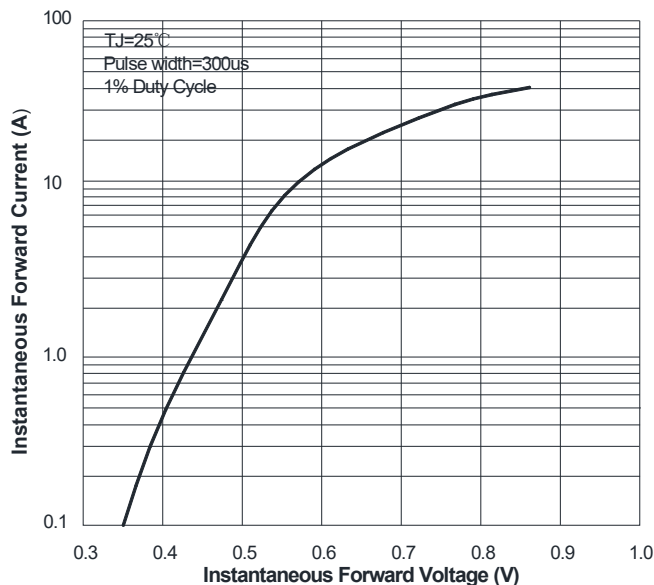
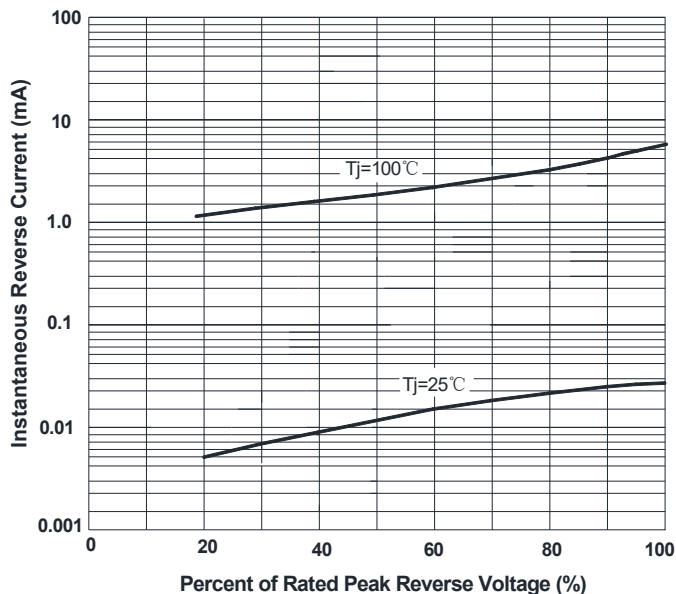
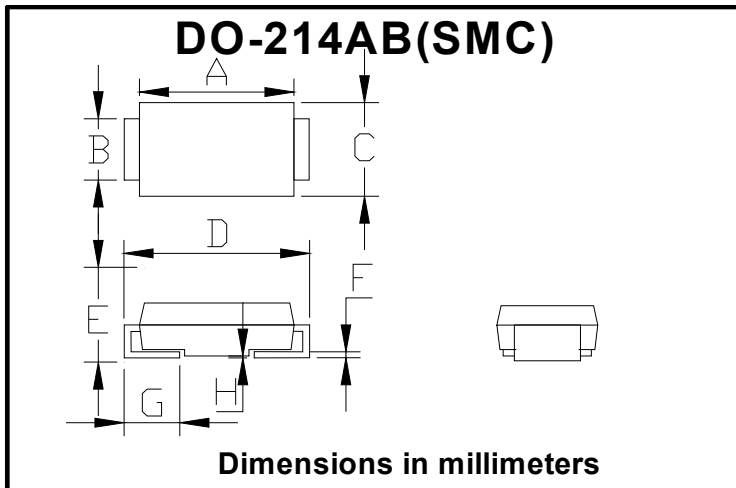


FIG.4: Typical Reverse Characteristics

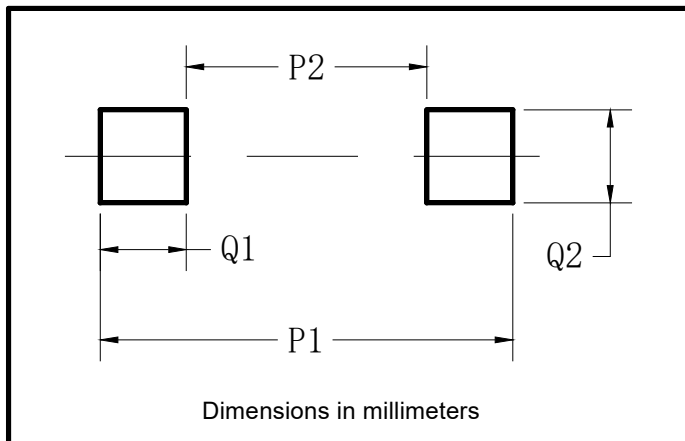


■ Outline Dimensions



DO-214AB (SMC)		
Dim	Min	Max
A	6.60	7.11
B	2.85	3.27
C	5.59	6.22
D	7.75	8.13
E	1.99	2.61
F	0.15	0.31
G	0.76	1.52
H	0.05	0.20

■ Suggested pad layout



DO-214AB (SMC)	
Dim	Min
P1	9.9
P2	3.84
Q1	3.03
Q2	3.82

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