SS82~SS810(SK82~SK810) SMB

Schottky rectifier

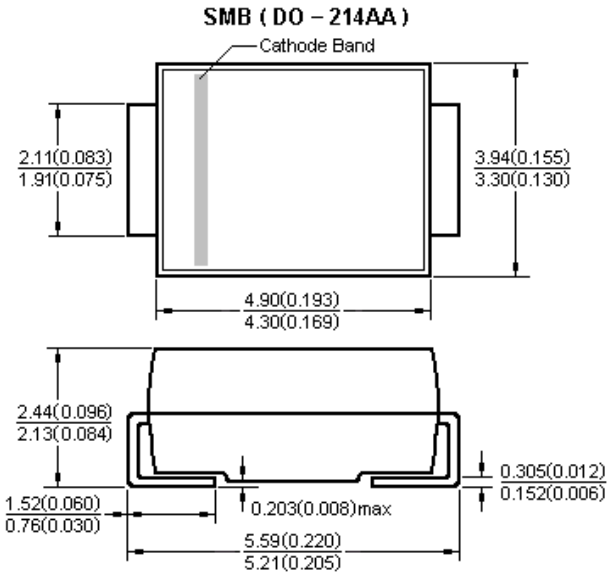
Major Ratings and Characteristics

$I_{F(AV)}$	8.0 A
V_{RRM}	20 V to 100 V
I_{FSM}	150 A
V_F	0.50V,0.55 V , 0.70 V, 0.85V
T_j max.	125 °C

SMB (DO – 214AA)

Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering：
  260℃/10 seconds at terminals
- Component in accordance to
  RoHS 2002/95/1 and WEEE 2002/96/EC



Dimensions in millimeters and (inchs)

Mechanical Date

- **Case:** JEDEC DO-214AA molded plastic body over passivated chip
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Laser band denotes cathode end

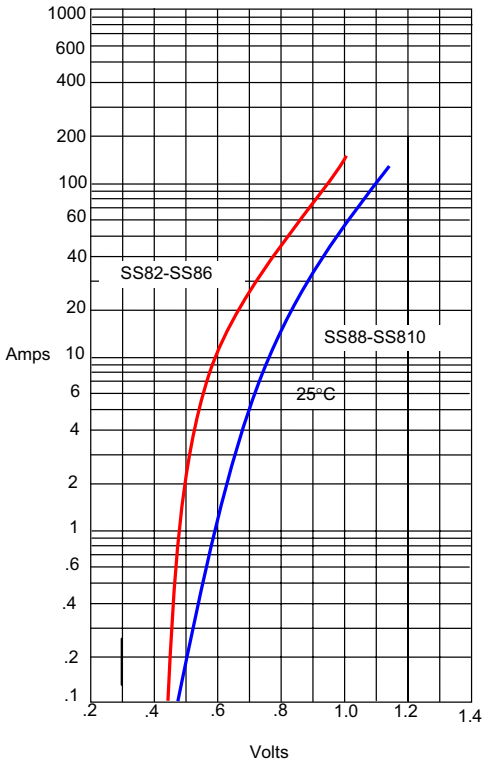
Maximum Ratings & Thermal Characteristics & Electrical Characteristics

(T_A = 25 °C unless otherwise noted)

	Symbol	SS82 SK82	SS83 SK83	SS84 SK84	SS85 SK85	SS86 SK86	SS88 SK88	SS810 SK810	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum average forward rectified current	$I_{F(AV)}$	8							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	150							A
Maximum instantaneous forward voltage at 5.0A	V_F	0.50	0.55		0.70		0.85		V
Maximum DC reverse current T_A = 25 ℃	I_R	0.5							mA
at Rated DC blocking voltage T_A = 100℃		10					20		
Thermal resistance from junction to Lead	$R_{\theta JL}$	10							℃/ W
Operating junction and storage temperature range	T_J, T_{STG}	–65 to +150							℃

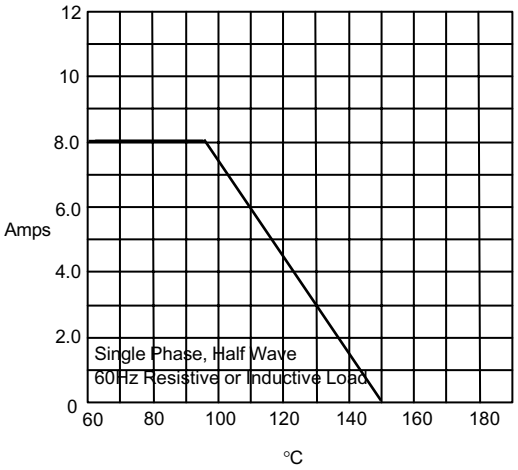
Note:Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3 x 0.3" (8.0 x 8.0 mm) copper pad areas

Figure 1
Typical Forward Characteristics



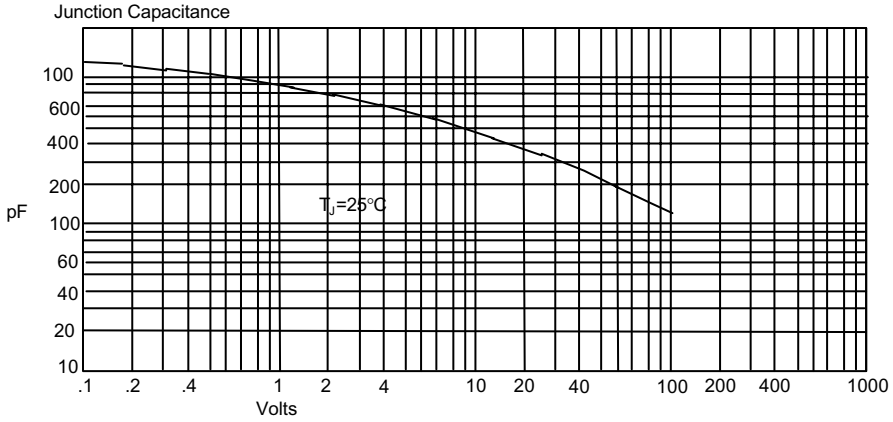
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes*versus*
Junction Temperature -°C

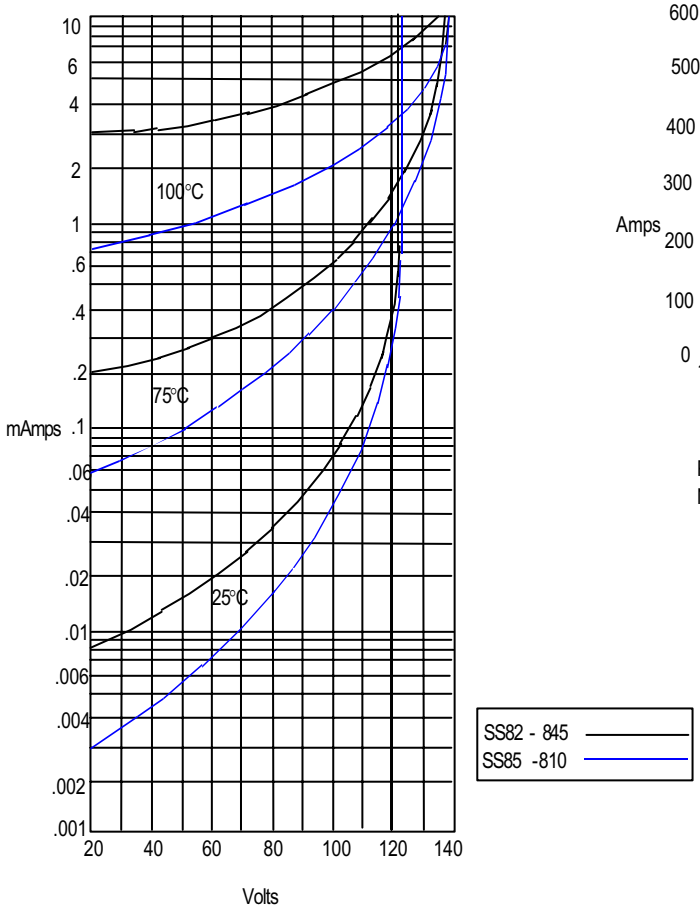
Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

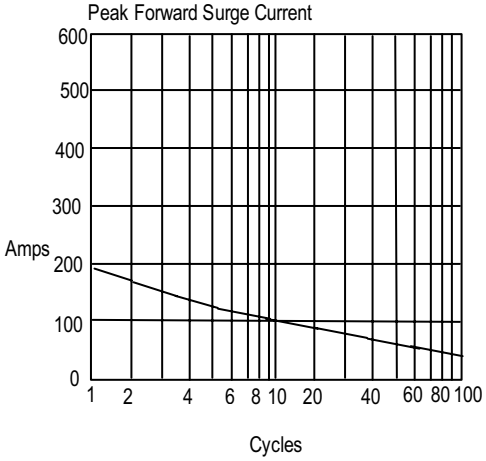
The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles

The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!