

VOLTAGE RANGE: 20 - 100V

CURRENT: 8.0 A

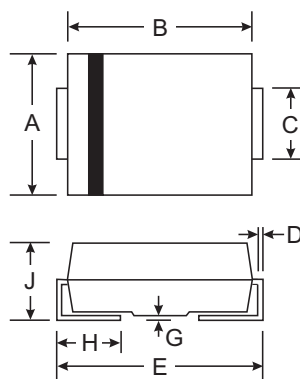
Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O



Mechanical Data

- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)



SMC/DO-214AB		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

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	SS82	SS83	SS835	SS84	SS85	SS86	SS88	SS810	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	20	30	35	40	50	60	80	100	V
RMS Reverse Voltage	V _{R(RMS)}	14	21	24.5	28	35	42	56	70	V
Average Rectified Output Current @T _L = 90°C	I _O	8.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	200.0								A
Forward Voltage @I _F = 8.0A	V _{FM}	0.65						0.85		V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	1.0 20								mA
Typical junction capacitance (Note1)	C _J	400								pF
Typical Thermal Resistance (Note 2)	R _{θJA}	18								°C/W
Operating Temperature Range	T _j	-65 to +125								°C
Storage Temperature Range	T _{STG}	-65 to +150								°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

FIG. 1- FORWARD CURRENT DERATING CURVE

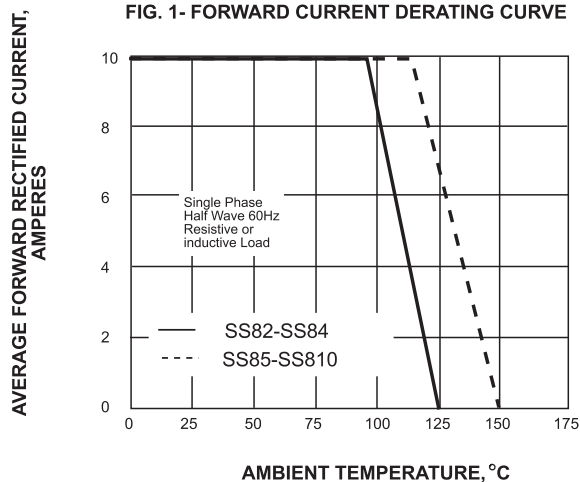


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

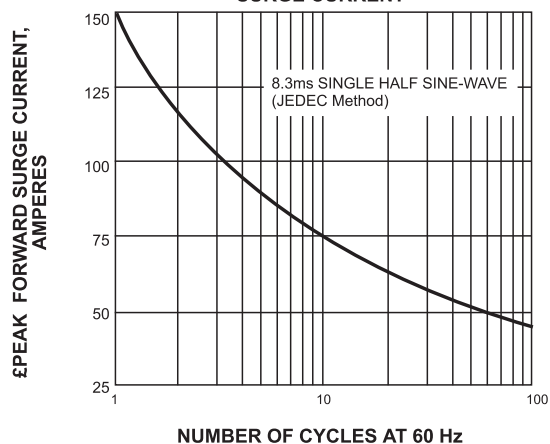


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

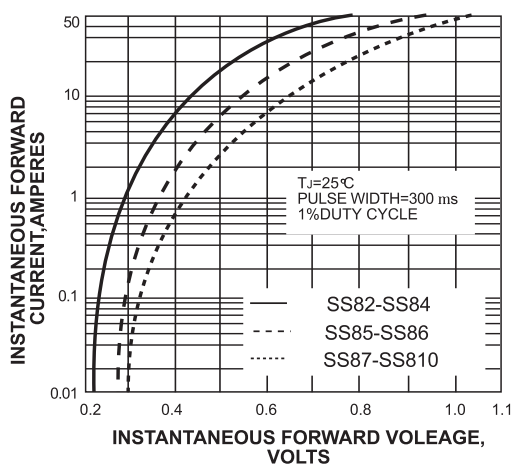


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

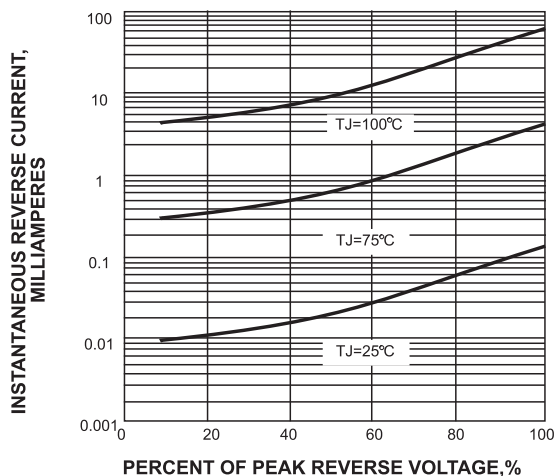


FIG. 5-TYPICAL JUNCTION CAPACITANCE

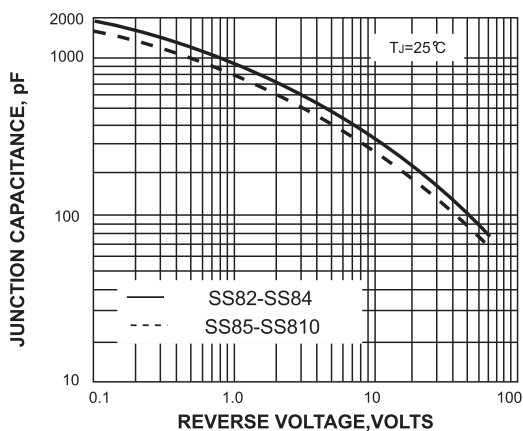


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

