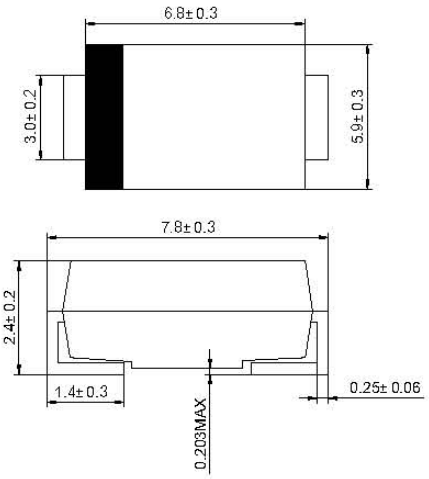
SS32C THRU SS310C

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 V
Forward Current - 3 A

SMC (DO-214AB)



Dimensions in millineters

Features

- Guard ring protection
- Low forward voltage
- High current capability

Mechanical Data

- **Case:** SMC (DO-214AB) molded plastic body
- **Polarity:** color band denotes cathode end
- **Mounting Position:** Any

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbols	SS32C	SS33C	SS34C	SS35C	SS36C	SS38C	SS39C	SS310C	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current at T_T = 100 °C	$I_{F(AV)}$	3								A
Peak Forward Surge Current, 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	100								A
Maximum Forward Voltage at 3 A	V_F	0.5			0.75		0.85			V
Maximum DC Reverse Current T_a = 25℃	I_R	0.5								mA
at Rated DC Blocking Voltage T_a = 100℃		20			10					
Typical Junction Capacitance [1]	C_j	250								pF
Thermal Resistance from Juntion to Terminal [2]	$R_{\theta JT}$	10								°C/W
Thermal Resistance from Juntion to Ambient	$R_{\theta JA}$	50								°C/W
Operating Junction Temperature Range	T_j	- 55 to + 125								°C
Storage Temperature Range	T_{stg}	- 55 to + 150								°C

[1] Measured at 1MHz and applied reverse voltage of 4 V DC.

[2] Thermal Resistance: Junction to terminal, unit mounted on PC board with 5 mm^2 (0.013 mm thick) copper pad as heat sink.

TOP DYNAMIC

FIG. 1- FORWARD CURRENT DERATING CURVE

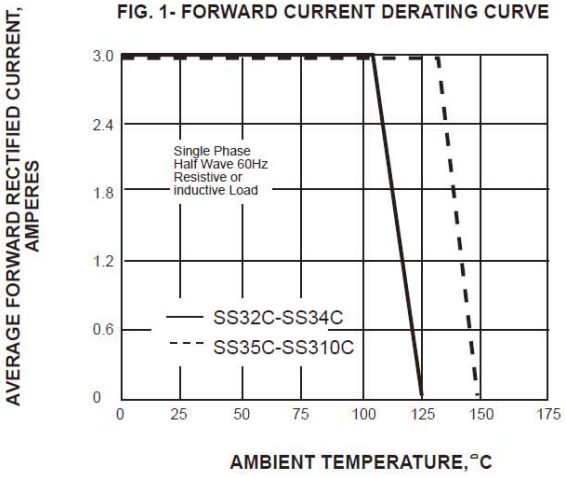


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

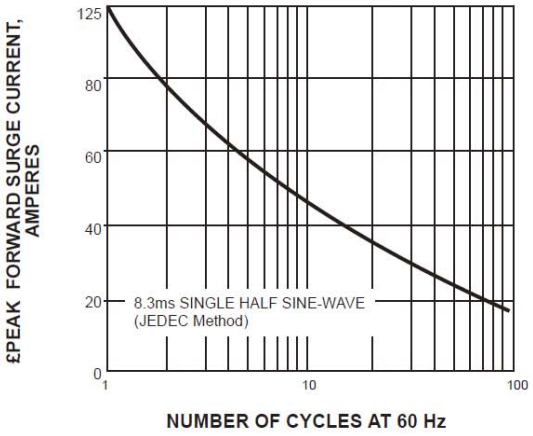


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

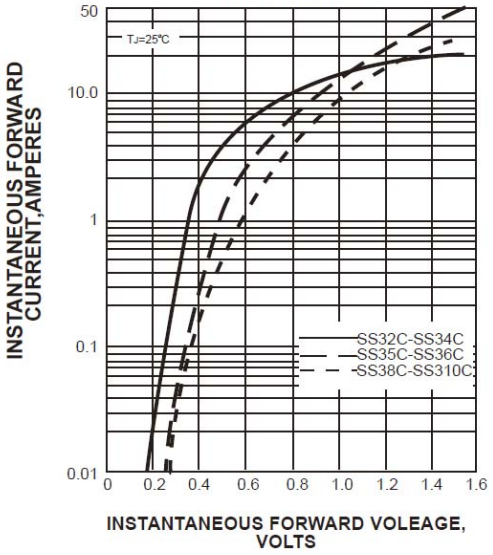


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

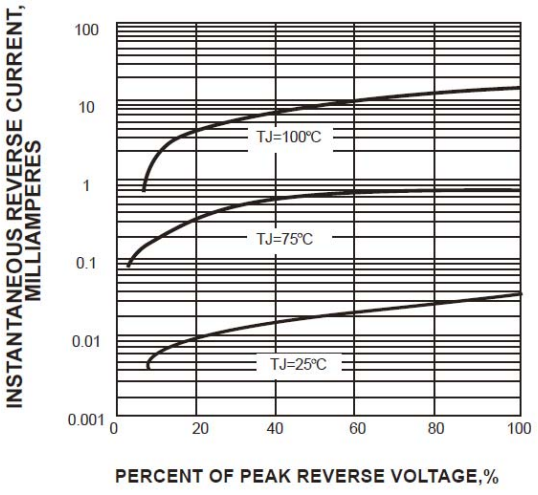


FIG. 5-TYPICAL JUNCTION CAPACITANCE

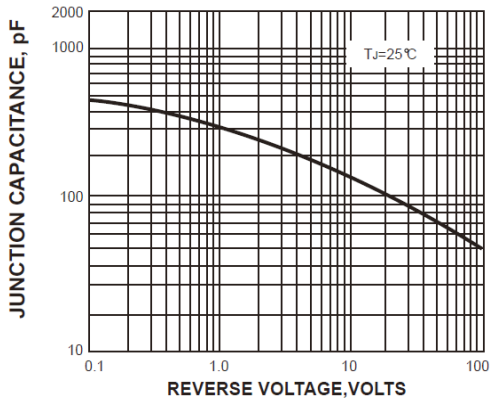


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE