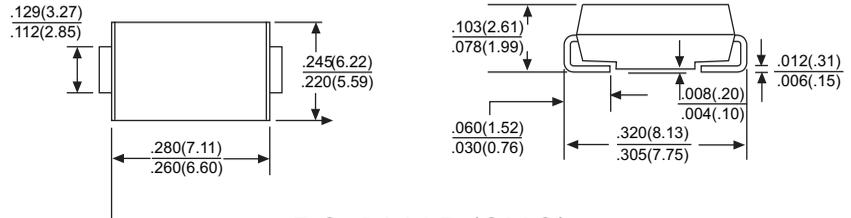


FEATURES

- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High surge current capability
- Low forward voltage drop
- Guard ring for over-voltage protection



DO-214AB (SMC)

Dimensions in inches and (millimeters)

MECHANICAL DATA

- Molded plastic body (UL 94V-0 rated)
- Terminals: Solder plated
- Polarity: Indicated by cathode band
- Packaging: 16mm tape EIA STD RS-481
- Weight: 0.093 grams

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Parameter	Symbol	SS52	SS53	SS54	SS55	SS56	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	V
Maximum Average Forward Rectified Current @ T _L = 90°C	I _{F(AV)}	5.0					A
Peak Forward Surge Current 8.3ms Single Half-Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	150					A
Peak Forward Voltage I _F = 5.0A	V _F	0.55		0.60		0.70	V
Maximum DC Reverse Current @ T _A = 25°C at rated DC Blocking Voltage @ T _A = 100°C	I _{RRM1}	0.5					mA
	I _{RRM2}	50					
Typical Thermal Resistance Junction to Lead (Note)	R _{θJA}	60					°C / W
	R _{θJL}	20					
Operating Temperature Range	T _J	-55 to +150					°C
Storage Temperature Range	T _{STG}	-55 to +150					°C

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

RATING & CHARACTERISTIC CURVES

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

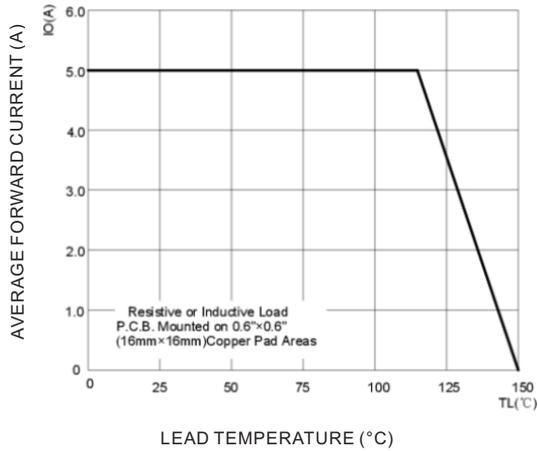


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

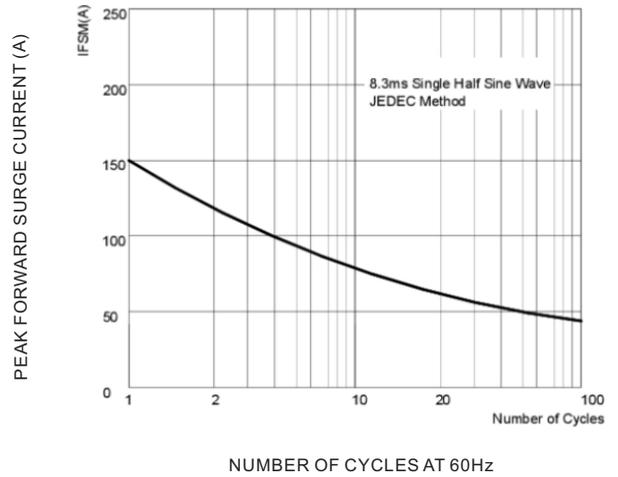


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

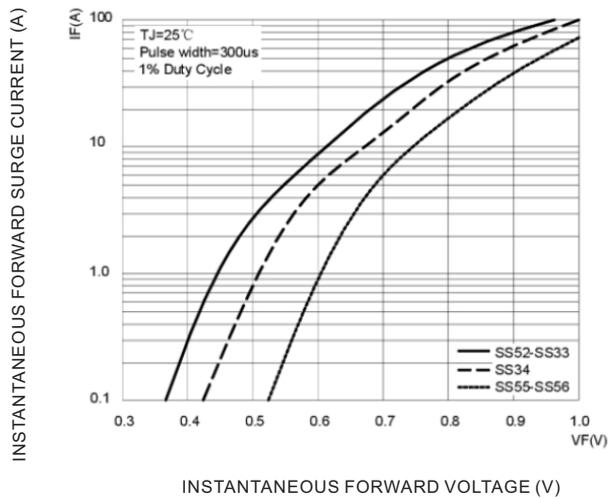


FIG.4-TYPICAL REVERSE CHARACTERISTICS

