

SS22 THRU SS210

FEATURES

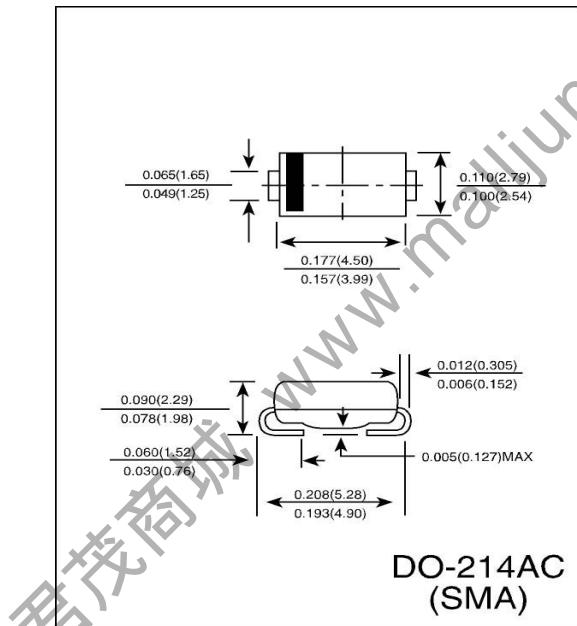
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low profile surface mount package
- Built-in strain relief
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection

MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic over JEDEC DO-214AC molded plastic over
- Terminals: Solder plated, solderable per MIL - STD - 750, Method 2026
- High temperature soldering guaranteed:
250°C/10 seconds at terminals
- Polarity: Color band denotes cathode end
- Weight: 0.002 ounce, 0.064 gram DO-214AC (SMA)
0.003 ounce, 0.093 gram DO-214AA (SMB)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified



Maximum Ratings and Thermal Characteristics

Parameter	Symbol	SS22	SS23	SS24	SS25	SS210	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	100	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	V
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	V
Max. average forward rectified current at T _L (See Fig. 1)	I _{F(AV)}				2.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}				75		A
Typical thermal resistance ⁽²⁾	R _{θ JA} R _{θ JL}			75 17			°C/W
Operating junction temperature range	T _J	-65 to +125		-65 to +150			°C
Storage temperature range	T _{STG}	-65 to +150					°C

Electrical Characteristics

Maximum instantaneous forward voltage at 2.0A ⁽¹⁾	V _F	0.50	0.70	V
Maximum DC reverse current ⁽¹⁾ at rated DC blocking voltage	T _A = 25°C T _A = 100°C	I _R	0.4 10	mA

Notes: (1) Pulse test: 300 s pulse width, 1% duty cycle

(2) Thermal resistance junction to lead P.C.B. mounted 0.375" (9.5mm) lead length

RATINGS AND CHARACTERISTIC CURVES SS22 THRU SS210

Fig. 1 - Forward Current Derating Curve

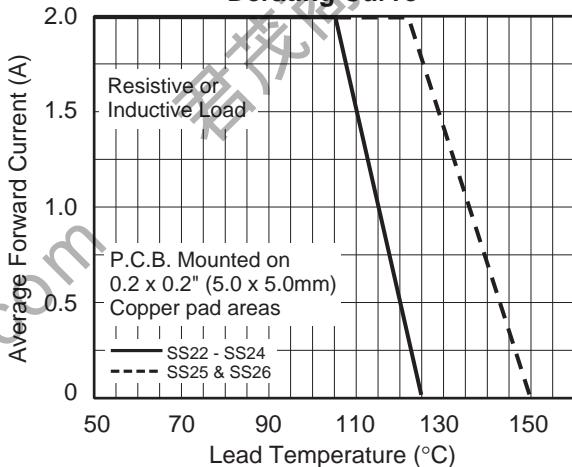


Fig. 2 - Maximum Non-repetitive Surge Current

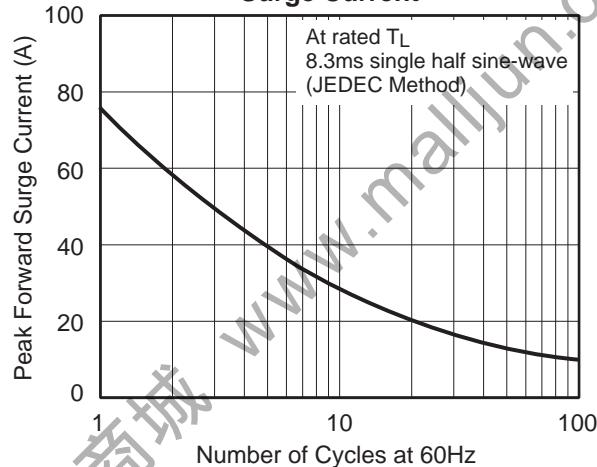


Fig. 3 - Typical Instantaneous Forward Characteristics

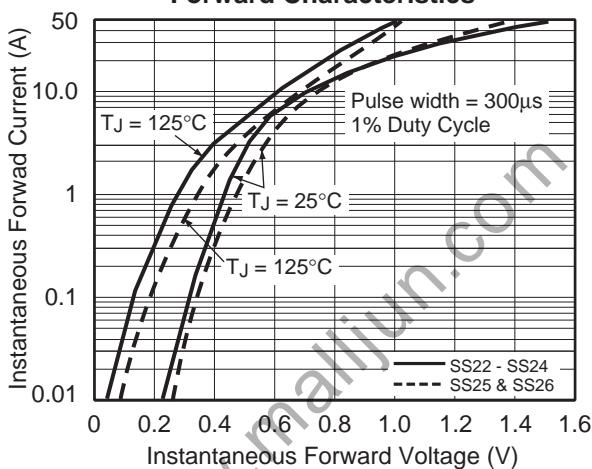


Fig. 4 - Typical Reverse Current Characteristics

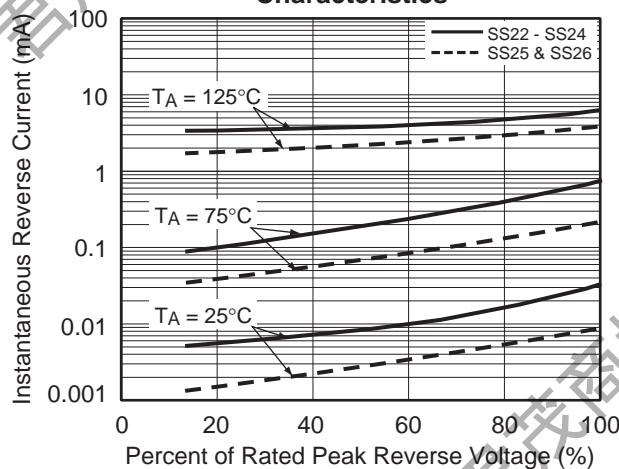


Fig. 5 - Typical Junction Capacitance

