



Surface Mount Schottky Rectifiers

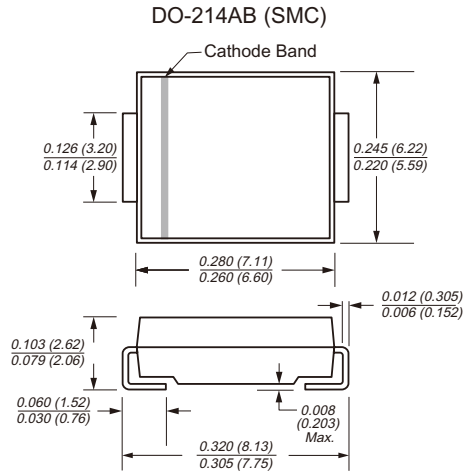
Reverse Voltage 20 to 60V
Forward Current 5.0A

Features

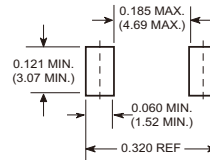
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low profile surface mount package
- * Built-in strain relief
- * Low power loss, high efficiency
- * For use in low voltage high frequency inverters, free wheeling, and polarity protection applications

Mechanical Data

Case: JEDEC DO-214AB molded plastic body
 Terminals: Solder plated, solderable per MIL-STD750, Method 2026
 High temperature soldering guaranteed:
 250-C/10 seconds at terminals
 Polarity: Color band denotes cathode end
 Weight: 0.003 oz., 0.093 g



Mounting Pad Layout



Dimensions in inches and (millimeters)

Maximum Ratings and Thermal Characteristics

($T_A = 25\text{-C}$ unless otherwise noted)

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	
Max. average forward rectified current at T_L (See Fig. 1)	$I_{F(AV)}$	5.0						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150						A
Typical thermal resistance ⁽²⁾	$R_{\theta JA}$ $R_{\theta JL}$	55 17						-C/W
Operating junction temperature range	T_J	s 55 to +125			s 55 to +150			-C
Storage temperature range	T_{STG}	s 55 to +150						-C

Electrical Characteristics

($T_A = 25\text{-C}$ unless otherwise noted)

Maximum instantaneous forward voltage at 5.0A ⁽¹⁾	V_F	0.55	0.70			V	
Maximum DC reverse current ⁽¹⁾ at rated DC blocking voltage	I_R	1.0					mA

Notes: (1) Pulse test: 300e 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 ($T_A = 25\text{-C}$ unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

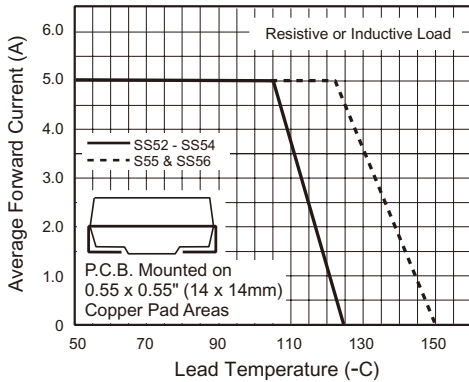


Fig. 2 - Maximum Non-repetitive Surge Current

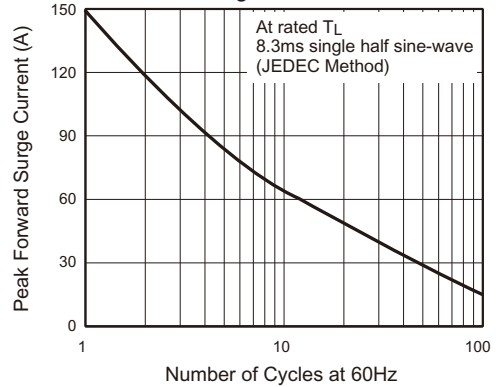


Fig. 3 - Typical Instantaneous Forward Characteristics

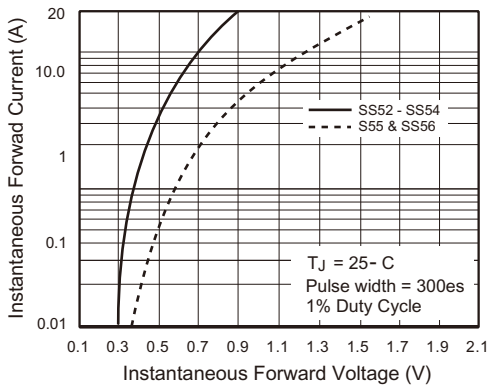


Fig. 4 - Typical Reverse Current Characteristics

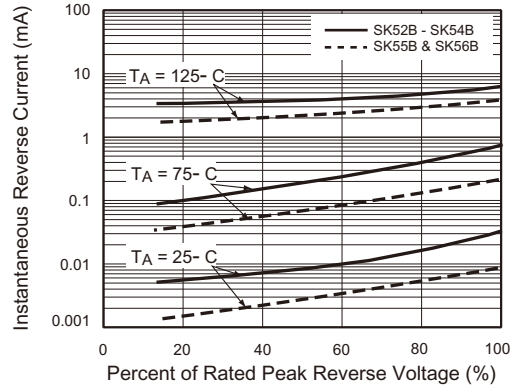


Fig. 5 - Typical Junction Capacitance

