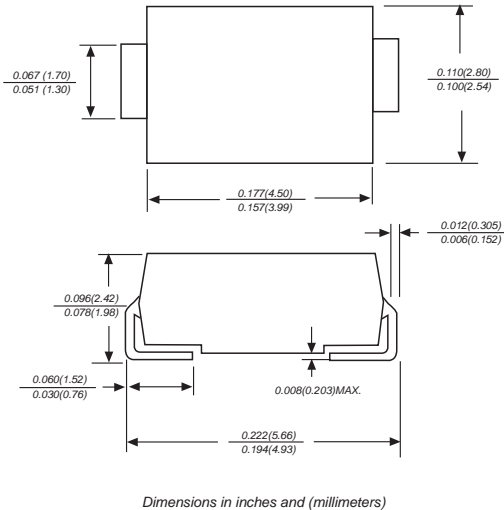




# SS2150 THRU SS2200

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**  
 Reverse Voltage - 150 to 200 Volts Forward Current - 2.0 Amperes

## DO-214AC/SMA



## FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:  
 250°C/10 seconds, 0.375" (9.5mm) lead length,  
 5 lbs. (2.3kg) tension

## MECHANICAL DATA

**Case:** JEDEC DO-214AC molded plastic body  
**Terminals:** leads solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.002 ounce, 0.07 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

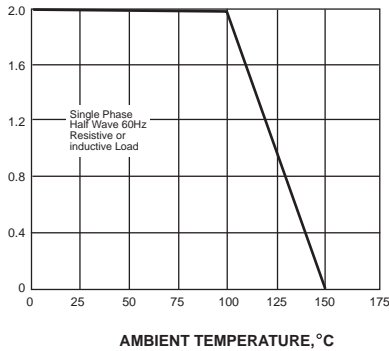
MDD Catalog Number	SYMBOLS	SS2150	SS2200	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	150	200	VOLTS
Maximum RMS voltage	$V_{RMS}$	105	140	VOLTS
Maximum DC blocking voltage	$V_{DC}$	150	200	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length (see fig. 1)	$I_{AV}$	2.0		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50.0		Amps
Maximum instantaneous forward voltage at 2.0A	$V_F$	0.85	0.95	Volts
Maximum DC reverse current at rated DC blocking voltage	$I_R$	0.2		mA
$T_A=25^\circ C$ $T_A=100^\circ C$		2.0		
Typical junction capacitance (NOTE 1)	$C_J$	80		pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	88		°C/W
Operating junction temperature range	$T_J$	-65 to +150		°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

# RATINGS AND CHARACTERISTIC CURVES SS2150 THRU SS2200

AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT, AMPERES

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

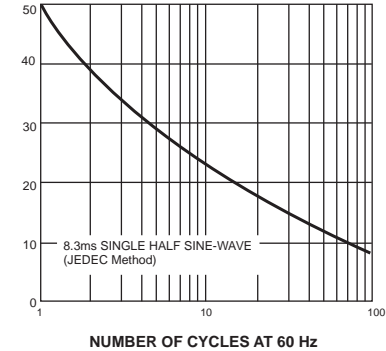
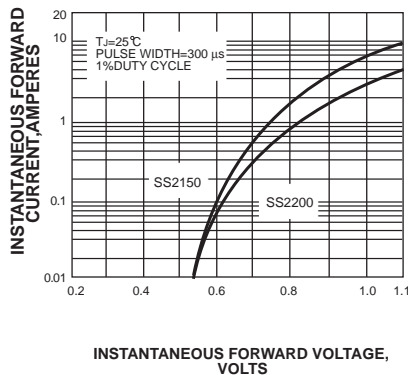


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

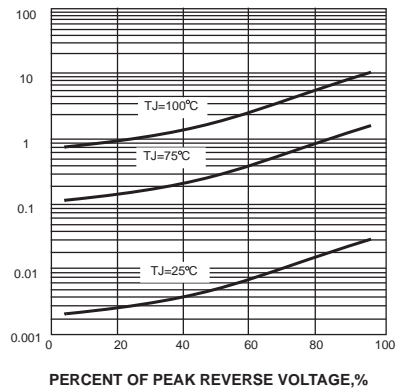
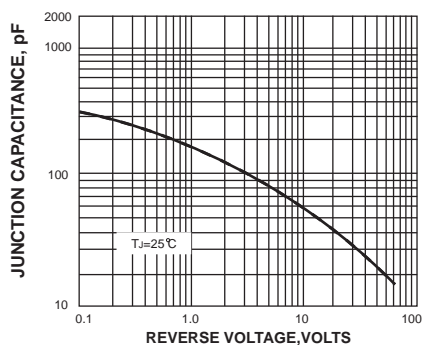


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

