

SS52B THRU SS510B

## 5A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

### **FEATURES**

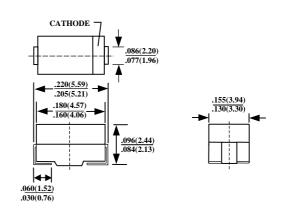
- FOR SURFACE MOUNTED APPLICATIONS
- LOW PROFILE PACKAGE
- BUILT-IN STRAIN RELIEF
- EASY PICK AND PLACE
- PLASTIC MATERIAL USED CARRIES UNDERWRITERS LABORATORY CLASSIFICATION 94 V-0
- EXTREMELY LOW VF
- MAJORITY CARRIER CONDUCTION
- $\bullet$  HIGH TEMPERATURE SOLDERING : 250°C/10 SECONDS ATTERMINALS

### MECHANICAL DATA

CASE: MOLDED PLASTICTERMINALS: SOLDER PLATED

• POLARITY: INDICATED BY CATHODE BAND

● WEIGHT: 0.093 GRAMS



CASE: DO-214AA (SMB)

DIMENSIONS IN INCHES AND (MILLIMETERS)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%

RATINGS	SYMBOL	SS52B	SS53B	SS54B	SS55B	SS56B	SS58B	SS510B	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	$V_{RRM}$	20	30	40	50	60	80	100	V
MAXIMUM RMS VOLTAGE	$V_{RMS}$	14	21	28	35	42	56	70	V
MAXIMUM DC BLOCKING VOLTAGE	$V_{DC}$	20	30	40	50	60	80	100	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT SEE FIG.1	$I_{O}$	5.0							A
MAXIMUM OVERLOAD SURGE 8.3ms SINGLE HALF SINE-WAVE	$I_{FSM}$	150							A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	$C_J$	300							PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{ heta iL}$	17							°C/W
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta jA}$	55							°C/W
STORAGE TEMPERATURE RANGE	$T_{STG}$	-55 TO + 150							$^{\circ}\mathbb{C}$
OPERATING TEMPERATURE RANGE	T <sub>OP</sub>	-55 TO + 125							$^{\circ}\mathbb{C}$

## ELECTRICAL CHARACTERISTICS (AT TA =25°C UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	SS52B	SS53B	SS54B	SS55B	SS56B	SS58B	SS510B	UNITS
MAXIMUM FORWARD VOLTAGE AT 5.0A AND 25℃	$V_F$	0.55		0.70		0.85		V	
MAXIMUM REVERSE CURRENT AT 25°C	$I_R$	1							mA

NOTE: 1. MEASURED AT 1.0 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V

- 2. P.C.B. MOUNTED 0.55"×0.55 "(14×14 mm) 0.013mm THICK COPPER PAD AREAS
- 3. SMA PACKAGE SUFFIX "A", SMB PACKAGE SUFFIX "B", SMC NO SUFFIX

# RATINGS AND CHARACTERISTIC CURVE SS52BTHRU SS510B

