

5A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

The figure shows three views of a DO-214AB (SMC) package. The top view shows dimensions A (total width) and B (cathode band width). The side view shows dimensions C (body width) and D (body height). The end view shows dimensions E (cathode band height) and F (cathode band width). A polarity symbol is shown below the top view.

Value Inch[mm]		
Dim.	Min.	Max.
A	0.305[7.75]	0.320[8.13]
B	0.260[6.60]	0.280[7.11]
C	0.220[5.59]	0.245[6.22]
D	0.079[2.01]	0.103[2.62]
E	0.030[0.76]	0.060[1.52]
F	0.114[2.90]	0.126[3.20]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. EXTREMELY LOW V_F
3. MAJORITY CARRIER CONDUCTION
4. BUILT-IN STRAIN RELIEF
5. LOW PROFILE
6. CASE: MOLDED PLASTIC, DO-214AB (SMC)
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. POLARITY: INDICATED BY CATHODE BAND
9. WEIGHT 0.21 GRAMS
10. RoHS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -55°C TO +125°C. SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

RATINGS	SYMBOL	VALUE	UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT (SEE FIG.1)	I_O	5	A
PEAK FWD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE	I_{FSM}	150	A
TYPICAL JUNCTION CAPACITANCE(NOTE1)	C_j	300	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JA}$	55	°C/W
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JL}$	17	°C/W
MAXIMUM REVERSE CURRENT AT 25°C	I_R	1000	uA

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. MAXIMUM FORWARD VOLTAGE AT I_O

PART NUMBER	MAX. RECURRENT PEAK REVERSE VOLTAGE V_{RRM} (V)	MAX. RMS VOLTAGE V_{RMS} (V)	MAX. DC BLOCKING VOLTAGE V_{DC} (V)	MAX. FORWARD VOLTAGE V_F (V)
SS52	20	14	20	0.55
SS53	30	21	30	0.55
SS54	40	28	40	0.55
SS55	50	35	50	0.70
SS56	60	42	60	0.70
SS58	80	56	80	0.85
SS510	100	70	100	0.85



RATING AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

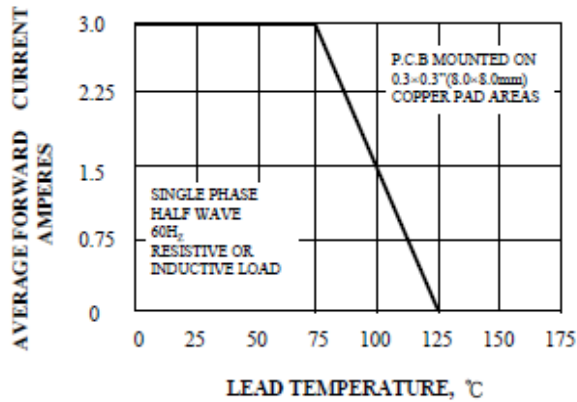


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

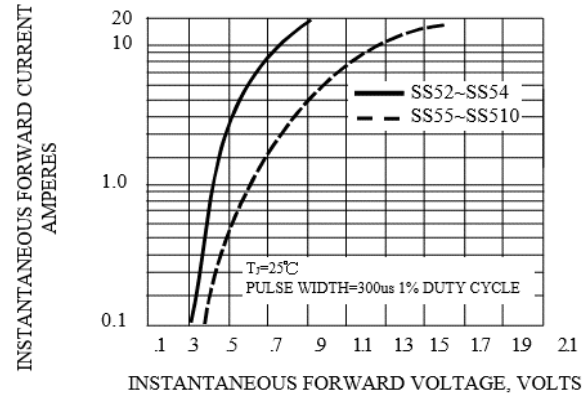


FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

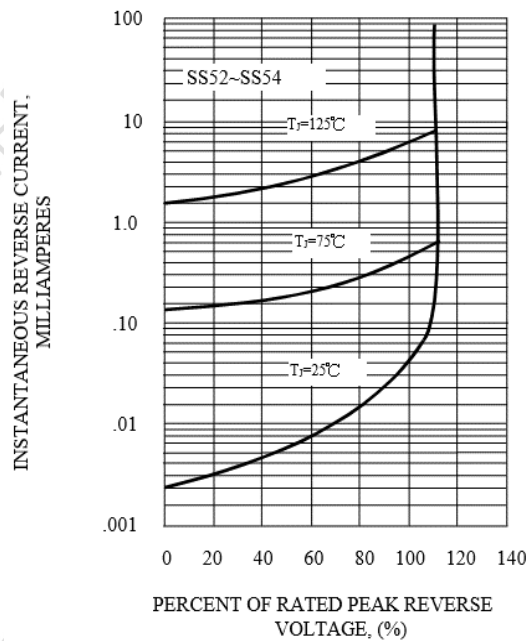


FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

