

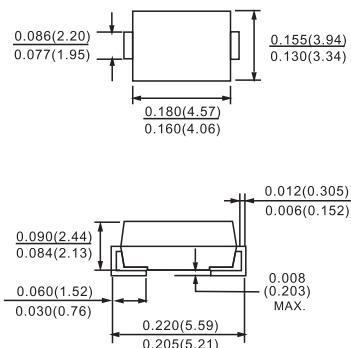
Features

For surface mounted application
Metal to silicon rectifier, majority carrier conduction
Low forward voltage drop
Easy pick and place
High surge current capability
Plastic material used carriers Underwriters
Laboratory Classification 94V-0
Epitaxial construction
High temperature soldering:
260°C / 10 seconds at terminals

Mechanical Data

Case: Molded plastic
Terminals: Solder plated
Polarity: Indicated by cathode band
Packaging: 12mm tape per EIA STD RS-481
Weight: 0.093gram

DO-214AA(SMB)



2.0 Ampere Schottky Barrier Rectifiers

Absolute Maximum Ratings*

$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
I_O	Average Rectified Current .375 " lead length @ $T_A = 75^\circ\text{C}$	2.0	A
$I_{f(\text{surge})}$	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	50	A
P_D	Total Device Dissipation Derate above 25°C	1.3 13	W mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient **	75	$^\circ\text{C}/\text{W}$
T_{stg}	Storage Temperature Range	-65 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	-65 to +125	$^\circ\text{C}$

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

**Device mounted on FR-4 PCB 0.013 mm.

Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

Parameter	Device								Units
	22	23	24	25	26	28	29	210	
Peak Repetitive Reverse Voltage	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	14	21	28	35	42	56	64	80	V
DC Reverse Voltage (Rated V_R)	20	30	40	50	60	80	90	100	V
Maximum Reverse Current $T_A = 25^\circ\text{C}$	0.4								mA
(Note 1) @ rated V_R $T_A = 100^\circ\text{C}$	10								mA
Maximum Forward Voltage @ 2.0 A	500			700		850			mV

Note:Pulse Test:Pulse width $\leq$ 300 μ s,Duty:cycle $\leq$ 2.0%

RATINGS AND CHARACTERISTIC CURVES (SS22 THRU SS210)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

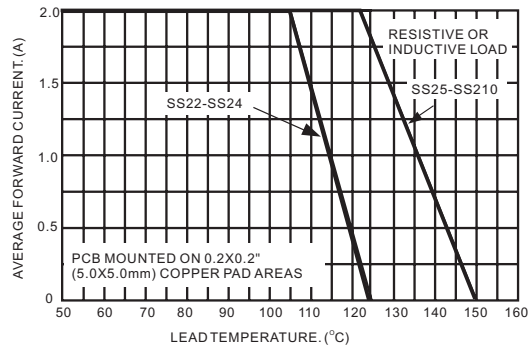


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

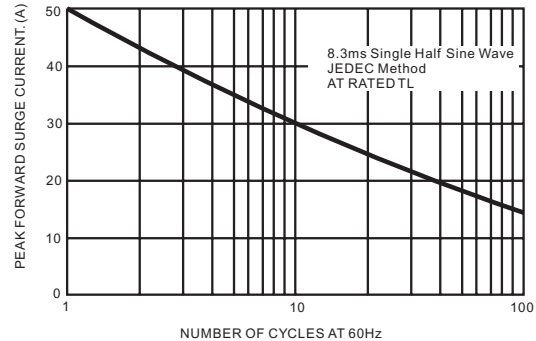


FIG.3- TYPICAL FORWARD CHARACTERISTICS

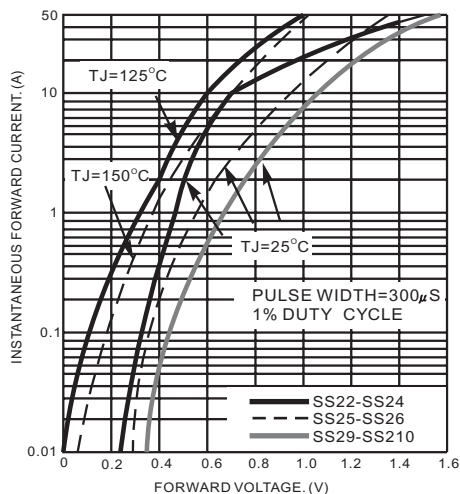


FIG.4- TYPICAL REVERSE CHARACTERISTICS

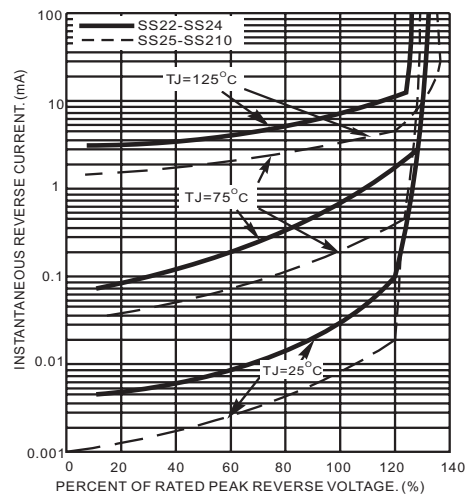


FIG.5- TYPICAL JUNCTION CAPACITANCE

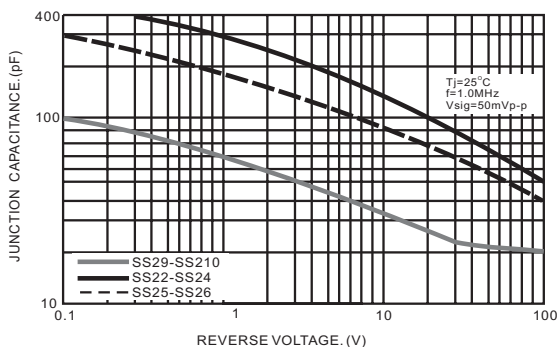


FIG.6- TYPICAL CAPACITANCE

