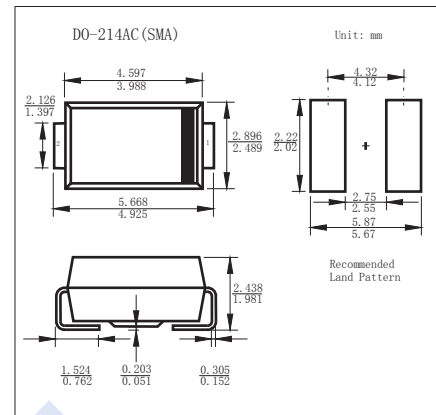


Schottky Diodes

1N5820 ~ 1N5822

■ Features

- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- Guardring for overvoltage protection

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	1N5820	1N5821	1N5822	Unit
Repetitive Peak Reverse Voltage	VRRM	20	30	40	V
RMS Voltage	VRMS	14	21	28	
Non-Repetitive Peak Reverse Voltage	VRSM	24	36	48	
Maximum DC Blocking Voltage	VDC	20	30	40	
Maximum Instantaneous Forward Voltage at 3.0 *1	VF	475	500	525	mV
Maximum Instantaneous Forward Voltage at 9.4 *1		850	900	950	
Averaged Forward Current. $T_L=95^\circ\text{C}$	IFAV	3			A
Peak Forward Surge Current $T_L=75^\circ\text{C}$	IFSM	80			
Maximum DC Reverse Current $T_a=25^\circ\text{C}$	IR	2			mA
$T_a=100^\circ\text{C}$ *1		20			
Thermal Resistance From Junction to Ambient	R θ JA	40			$^\circ\text{C}/\text{W}$
Thermal Resistance From Junction to Lead	R θ JL	10			
Junction Temperature	Tj	125			$^\circ\text{C}$
Storage Temperature	Tstg	-65 to 125			

*1:Pulse test: 300ms pulse width, 1% duty cycle

■ Marking

NO.	1N5820	1N5821	1N5822
Marking	SS32	SS33	SS34

Schottky Diodes

1N5820 ~ 1N5822

■ Typical Characteristics

FIG. 1 - FORWARD CURRENT DERATING CURVE

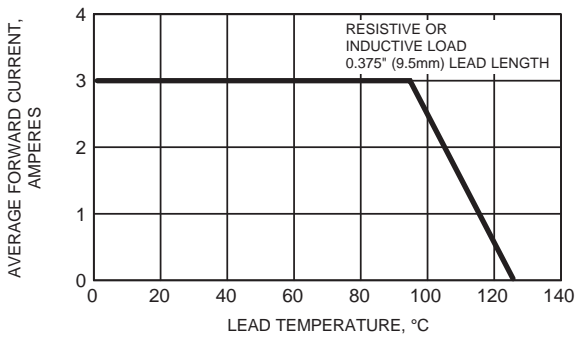


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

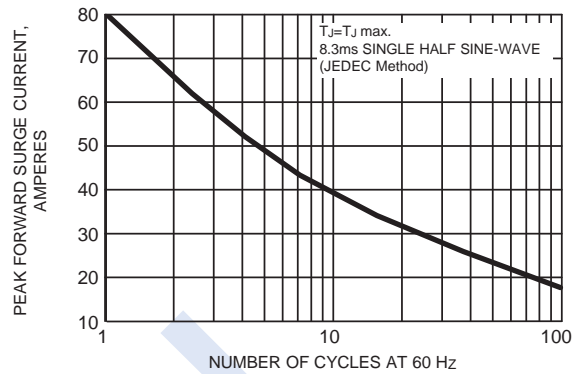


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

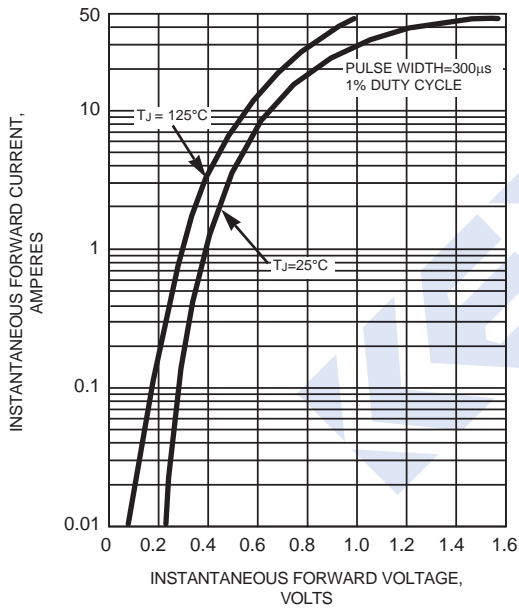


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

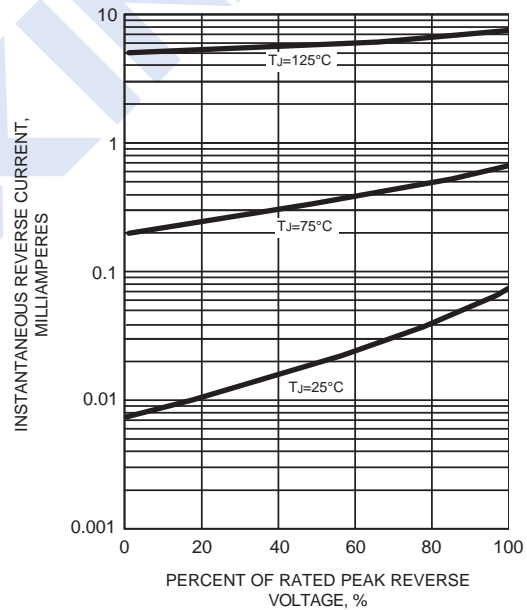


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

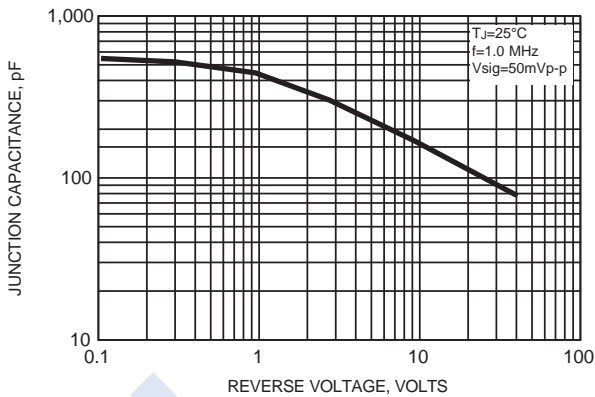


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

