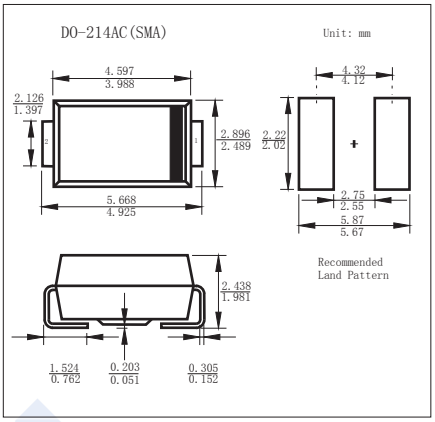
Schottky Diodes

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 Ta = 25℃

Parameter	Symbol	1N5820	1N5821	1N5822	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
RMS Voltage	V_{RMS}	14	21	28	
Non-Repetitive Peak Reverse Voltage	V_{RSM}	24	36	48	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	
Maximum Instantaneous Forward Voltage at 3.0 *1	V_F	475	500	525	mV
Maximum Instantaneous Forward Voltage at 9.4 *1		850	900	950	
Averaged Forward Current.T_L=95℃	I_{FAV}	3			A
Peak Forward Surge Current T_L=75℃	I_{FSM}	80			
Maximum DC Reverse Current Ta=25℃ *1	I_R	2			mA
Ta=100℃		20			
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	40			°C/W
Thermal Resistance From Junction to Lead	$R_{\theta JL}$	10			
Junction Temperature	Tj	125			℃
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 Characterisitics

FIG. 1 - FORWARD CURRENT DERATING CURVE

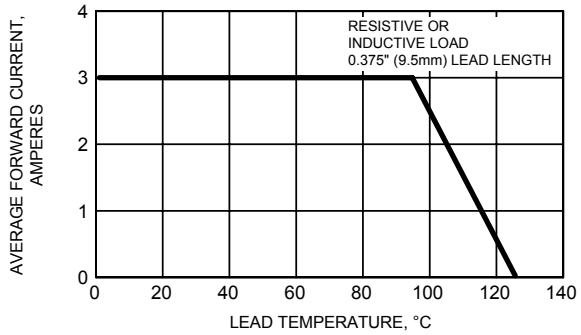


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

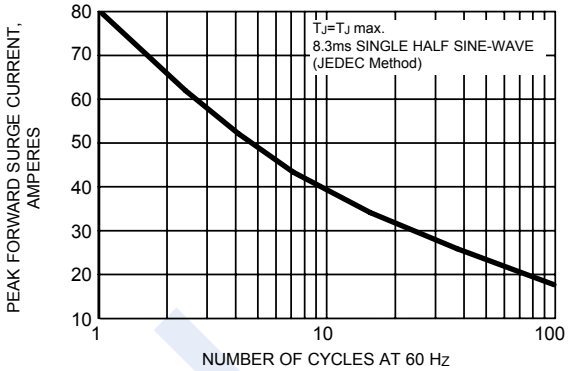


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

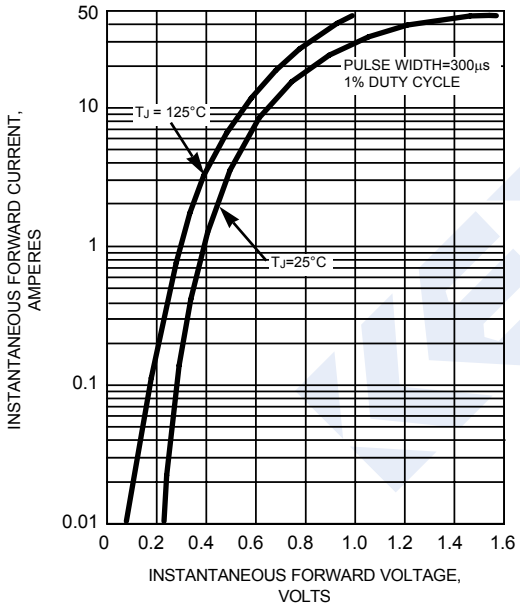


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

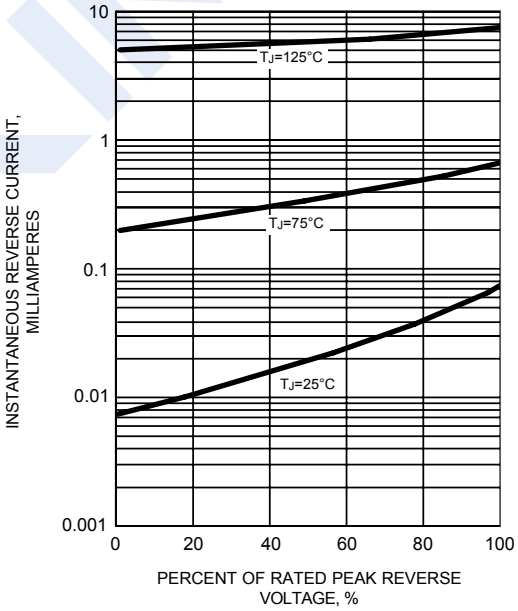


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

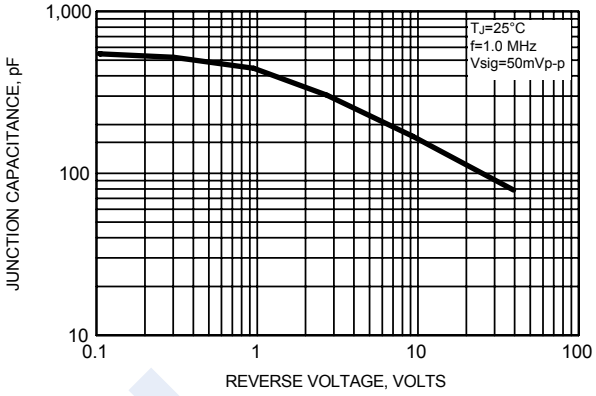


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE