

Major Ratings and Characteristics

$I_{F(AV)}$	1A
V_{RRM}	80V
I_{FSM}	100A
I_R	500uA
V_F	0.85V
T_{JMAX}	150°C

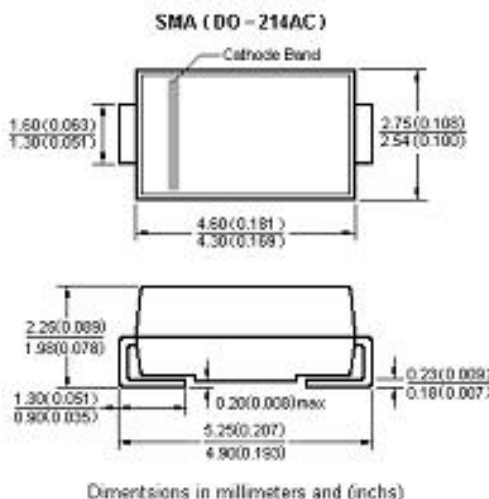


Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering:
260°C/10 seconds at terminals
- Component in accordance to
RoHS 2002/95/1 and WEEE 2002/96/EC

Mechanical Data

- Case: JEDEC DO-214AC molded plastic body over passivated chip
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Laser band denotes cathode end



Maximum Ratings & Thermal Characteristics & Electrical Characteristics

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

Type Number	SYMBOL	SS18	unit
	L	SS18	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	80	V
Maximum RMS Voltage	V_{RMS}	56	V
Maximum DC blocking Voltage	V_{DC}	80	V
Maximum Average Forward Rectified Current .at $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	1	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30	A
Maximum Forward Voltage at 1.5A DC	V_F	0.85	V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$	I_R	0.5	mA
At rated DC blocking voltage @ $T_A = 100^\circ\text{C}$		40	
Typical Thermal Resistance (Note 2)	$R_{(JA)}$	85	$^\circ\text{C}/\text{W}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$
Operation Junction Temperature	T_J	-55 to +125	$^\circ\text{C}$

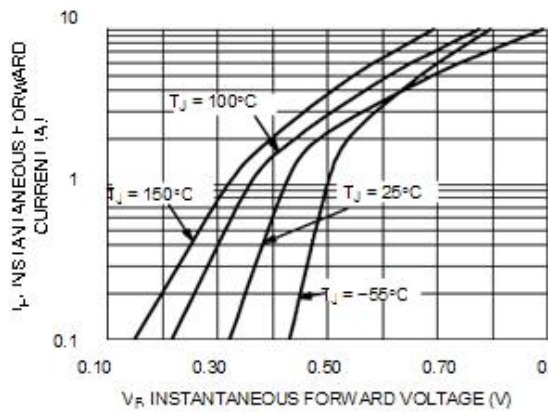


Figure 1. Typical Forward Voltage

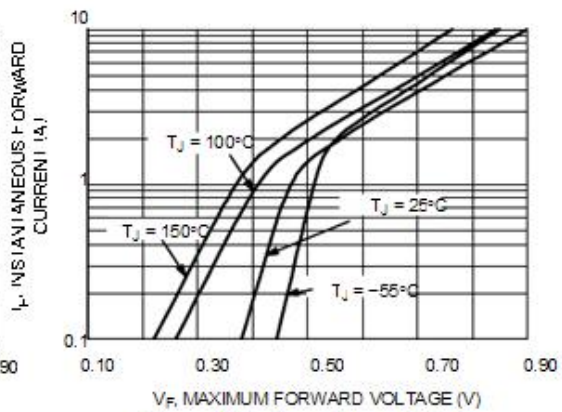


Figure 2. Maximum Forward Voltage

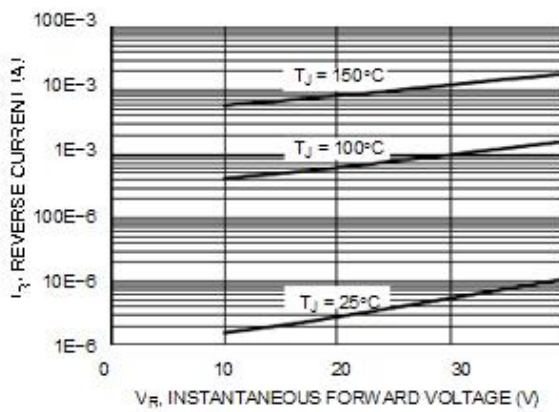


Figure 3. Typical Reverse Current

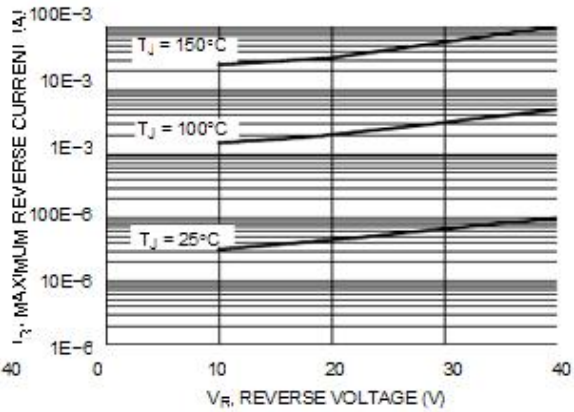


Figure 4. Maximum Reverse Current

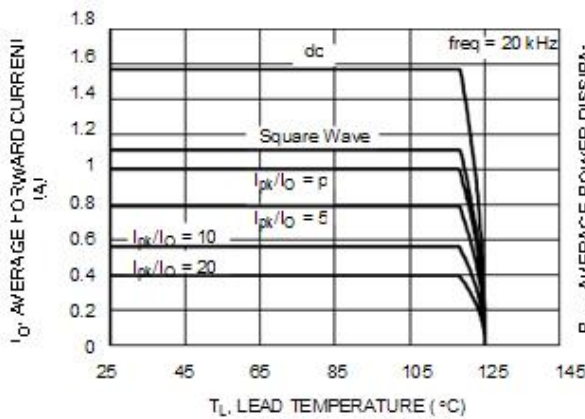


Figure 5. Current Derating

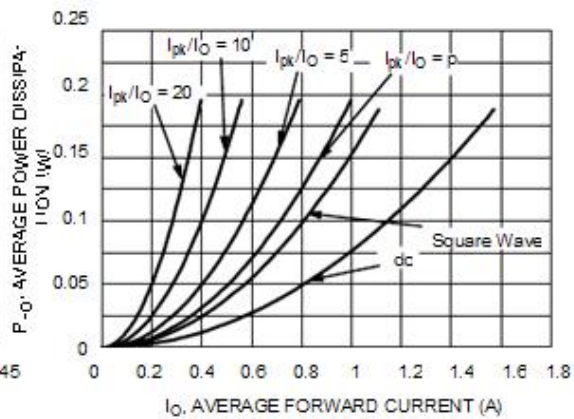


Figure 6. Forward Power Dissipation

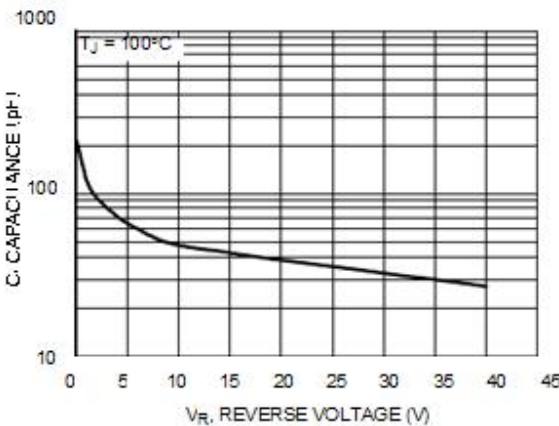


Figure 7. Capacitance

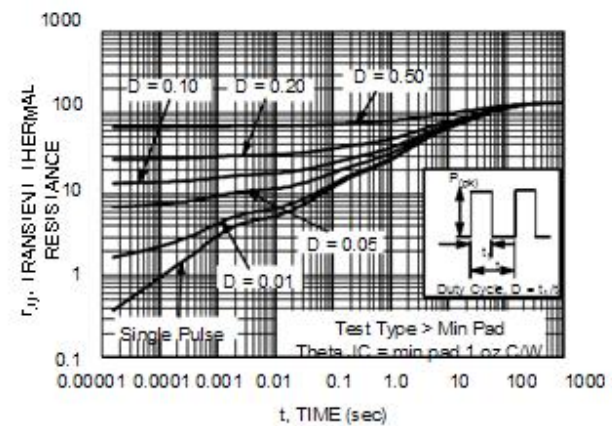


Figure 8. Thermal Response