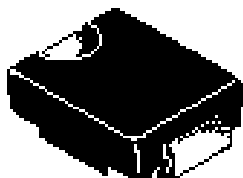


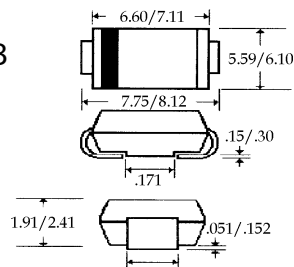
SMC520 ... 5100 Series

Description



Mechanical Dimensions

DO-214AB  
(SMC)



(Dimensions in mm)

Features

- EXTREMELY LOW  $V_F$
- LOW STORED CHARGE
- LOW POWER LOSS – HIGH EFFICIENCY
- MAJORITY CARRIER CONDUCTION
- MEETS UL SPECIFICATION 94V-0

SMC520 . . . 5100 Series							Units
Maximum Ratings	SMC520	SMC530	SMC540	SMC550	SMC560	SMC5100	
Peak Repetitive Reverse Voltage... $V_{RRM}$	20	30	40	50	60	100	Volts
Working Peak Reverse Voltage... $V_{RWM}$	20	30	40	50	60	100	Volts
DC Blocking Voltage... $V_{DC}$	20	30	40	50	60	100	Volts
RMS Reverse Voltage... $V_{R(rms)}$	14	21	28	35	42	70	Volts
Average Forward Rectified Current... $I_{F(av)}$	5.0						Amps
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$	150						Amps
Operating Temperature Range... $T_J$	< -65 to 125		> -65 to 150				°C
Storage Temperature Range... $T_{STRG}$	< -65 to 125		> -65 to 150				°C
Electrical Characteristics							
Maximum Forward Voltage... $V_F$ (Note 2)	.55	.55	.55	.65	.70	.85	Volts
Maximum DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage	$T_C = 25^\circ C$	0.5				mAmps	
		$T_C = 100^\circ C$	20				mAmps
Typical Junction Capacitance... $C_J$	< 250		> 360		> 200	pF	
Typical Thermal Resistance... $R_{\theta JA}$	60						°C / W

FIG-1 FORWARD CURRENT DERATING CURVE

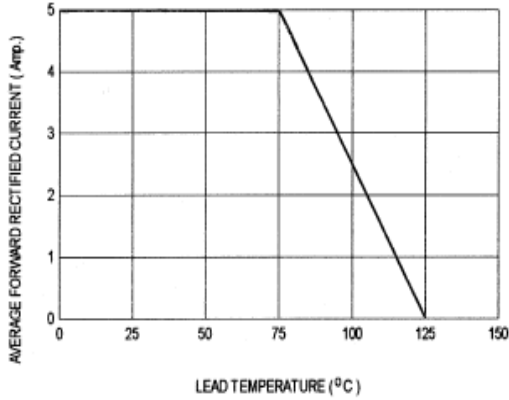


FIG-2 TYPICAL FORWARD CHARACTERISTICS

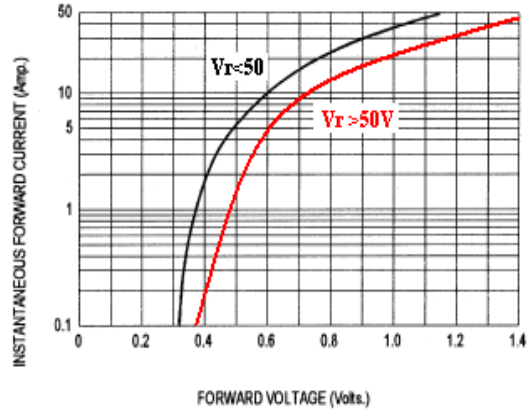


FIG-3 TYPICAL REVERSE CHARACTERISTICS

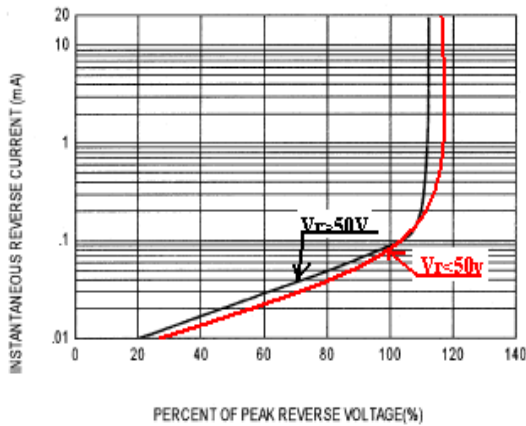


FIG-4 TYPICAL JUNCTION CAPACITANCE

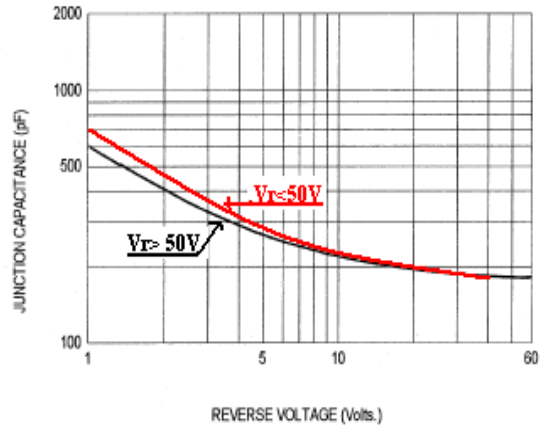


FIG-5 PEAK FORWARD SURGE CURRENT

