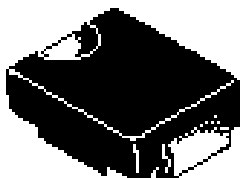


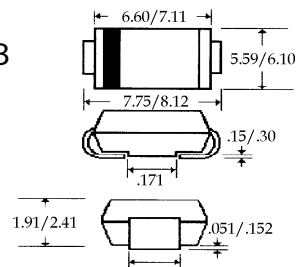
SMC520 ... 5100 Series

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°C			0.5			mAmps	
	T _C =100°C			20			mAmps	
Typical Junction Capacitance...C _J	<..... 250		><..... 360		> 200		pF	
Typical Thermal Resistance...R _{qJA}				60				°C / W



FIG-1 FORWARD CURRENT DERATING CURVE

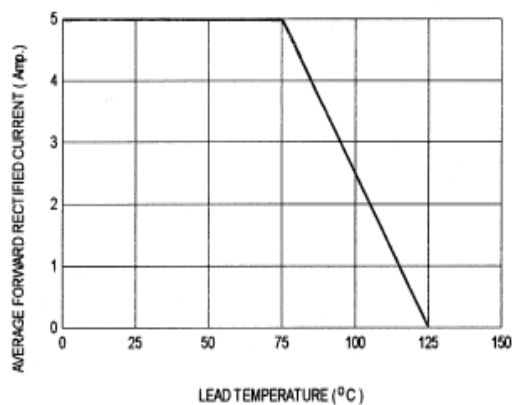


FIG-2 TYPICAL FORWARD CHARACTERISTICS

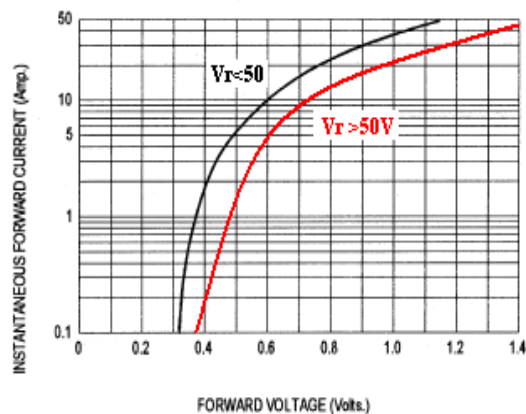


FIG-3 TYPICAL REVERSE CHARACTERISTICS

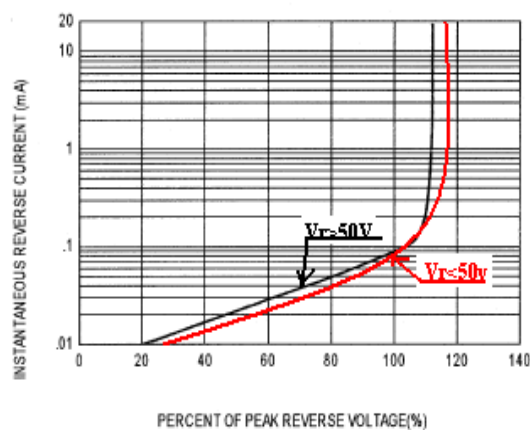


FIG-4 TYPICAL JUNCTION CAPACITANCE

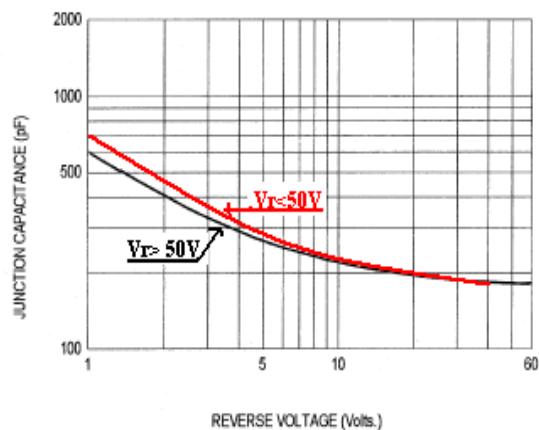


FIG-5 PEAK FORWARD SURGE CURRENT

