

SM520LC THRU SM5200LC

GW

5.0 AMP LOW VF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS



FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Low forward voltage drop

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

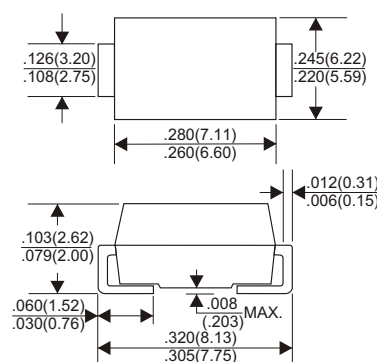
VOLTAGE RANGE

20 to 200 Volts

CURRENT

5.0 Amperes

DO-214AB(SMC)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SM520LC	SM540LC	SM560LC	SM580LC	SM5100LC	SM5150LC	SM5200LC	UNITS
Maximum Recurrent Peak Reverse Voltage	20	40	60	80	100	150	200	V
Maximum RMS Voltage	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current								
See FIG.1	5.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	80							A
Maximum Instantaneous Forward Voltage at 5.0A	0.45	0.55	0.70	0.80				V
Maximum DC Reverse Current Ta=25℃	0.5							mA
at Rated DC Blocking Voltage Ta=100℃	50							mA
Typical Junction Capacitance (Note1)	500	380					pF	
Typical Thermal Resistance RθJL (Note 2)	15	10					℃/W	
Operating Temperature Range Tj	-55 — +125		-55 — +150				℃	
Storage Temperature Range Tstg	-55 — +150							℃

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead.

RATING AND CHARACTERISTIC CURVES (SM520LC THRU SM5200LC)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

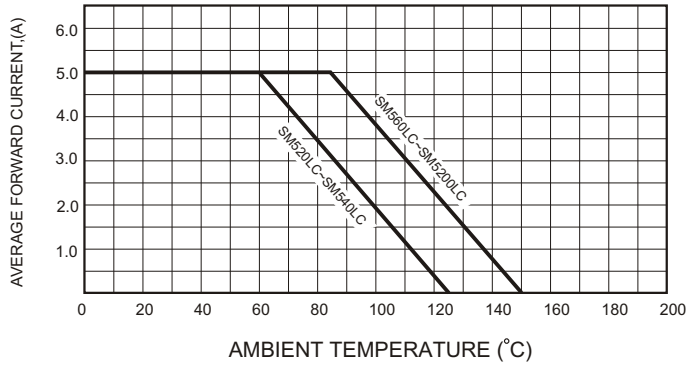


FIG.2-TYPICAL FORWARD CHARACTERISTICS

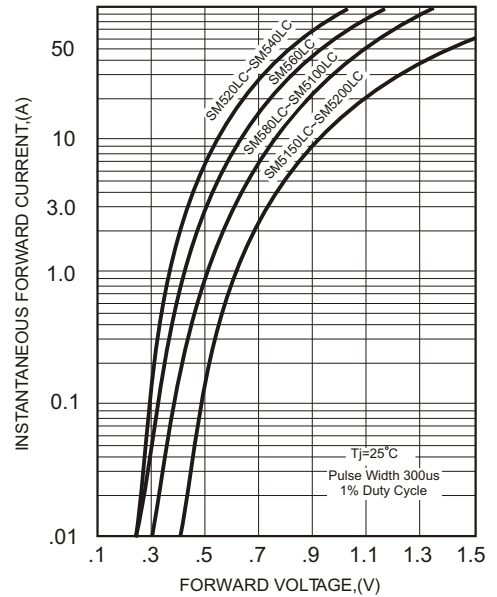


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

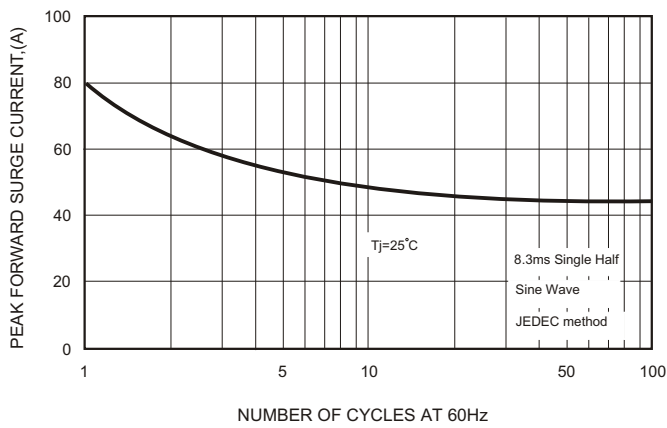


FIG.4-TYPICAL JUNCTION CAPACITANCE

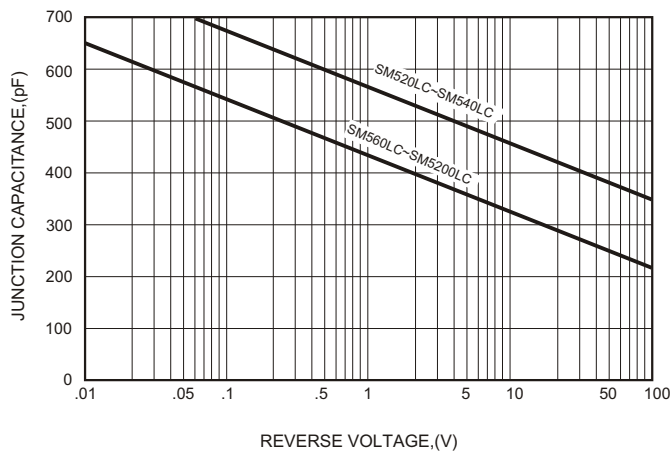


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

