SMLJ60S1-SMLJ60S10

SURFACE MOUNT RECTIFIER DIODES

VOLTAGE RANGE: 100 - 1000V
CURRENT: 6 .0 A

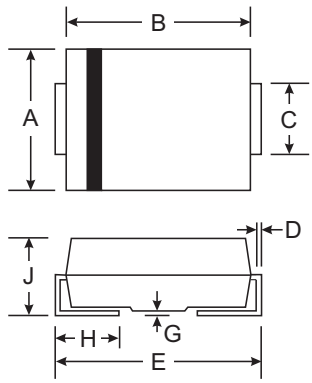
Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-O

Mechanical Data

- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)

RoHS COMPLIANT



SMC/DO-214AB		
Dim	**Min**	**Max**
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

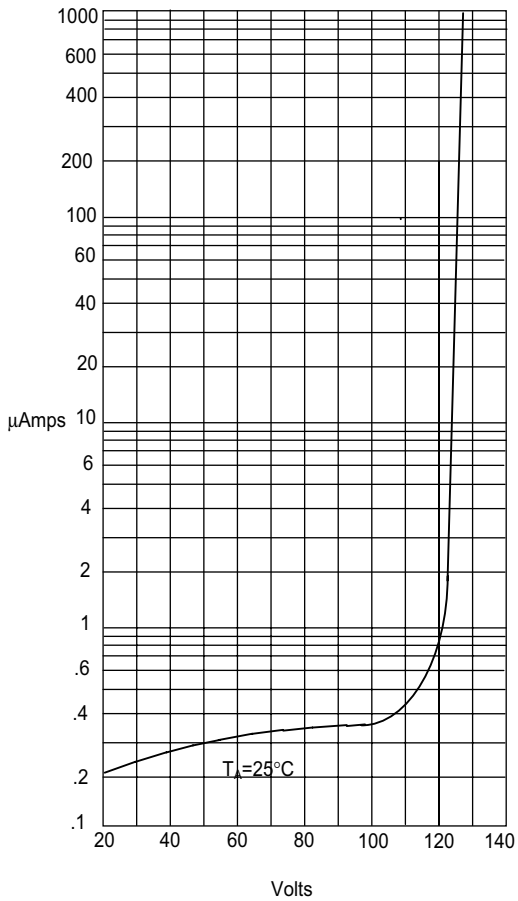
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	**Symbol**	SMLJ60S1	SMLJ60S2	SMLJ60S4	SMLJ60S6	SMLJ60S8	SMLJ60S10	**Unit**
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum average forward rectified current at T_L=75°C	$I_{(AV)}$	6.0						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200.0						A
Maximum instantaneous forward voltage at 6.0A	V_F	1.2						Volts
Maximum DC reverse current T_A=25°C at rated DC blocking voltage T_A=100°C	I_R	10.0 100.0						μA
Typical junction capacitance (NOTE 1)	C_J	60.0						pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	10.0						°C/W
Operating junction and storage temperature range	T_J ,T_{STG}	-55 to +150						°C

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

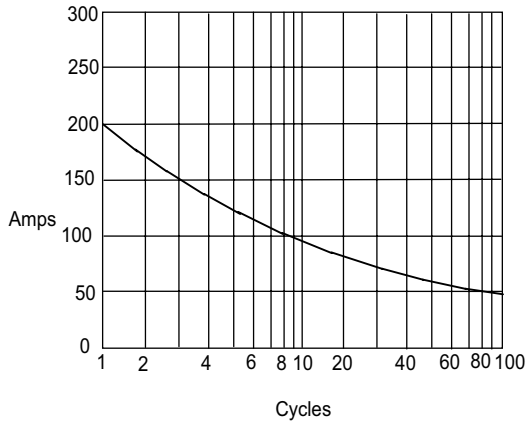
RATINGS AND CHARACTERISTIC CURVES **SMLJ60S1-SMLJ60S10**

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles