

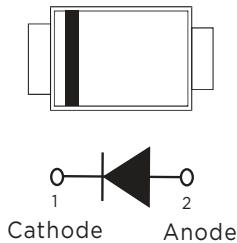
PART NUMBER	PACKAGE	VOLTAGE	CURRENT	CIRCUIT CONFIGURATION
S3K-□VL	SMC / DO-214AB	800V	3A	SINGLE

### FEATURES:

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Easy pick and place
- Glass passivated junction

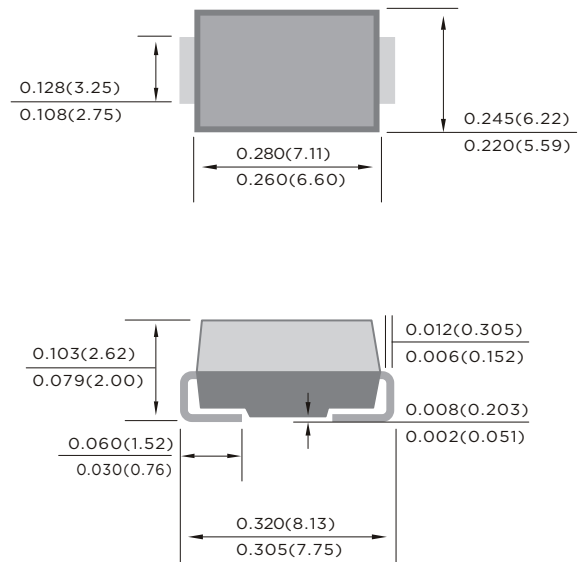
### MECHANICAL DATA:

- Case: JEDEC DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.0082 ounce, 0.2325 gram



### SMC / DO-214AB

Units: inch (mm)



### MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.

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

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	800	V
Maximum RMS Voltage	$V_{RMS}$	560	V
Maximum DC Blocking Voltage	$V_{DC}$	800	V
Maximum Average Forward Current at $T_L=75^\circ\text{C}$	$I_{F(AV)}$	3	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FMS}$	200	A
Maximum Forward Voltage at 3A	$V_F$	1.2	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_J=25^\circ\text{C}$	1	$\mu\text{A}$
	$T_J=125^\circ\text{C}$	250	
Maximum Junction Capacitance (Note 1)	$C_J$	53	pF
Typical Junction Resistance (Note 2)	$R_{\theta JL}$	13	$^\circ\text{C/W}$
	$R_{\theta JA}$	47	
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

#### NOTES:

1. Measured at 1MHZ and applied  $V_R=4$  volts.
2. 8mm2(0.013mm thick) land areas.

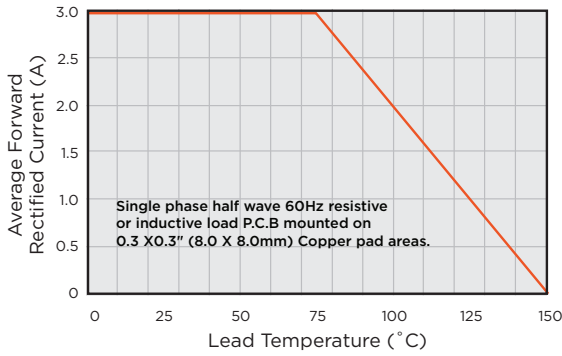
### ENVIRONMENTAL INFORMATION

RoHS Status	10 of 10 Compliant
REACH Status	Compliant
Halogen Status	Halogen Free
Conflict Mineral Status	Conflict Mineral Free
Moisture Sensitivity Level (MSL)	1

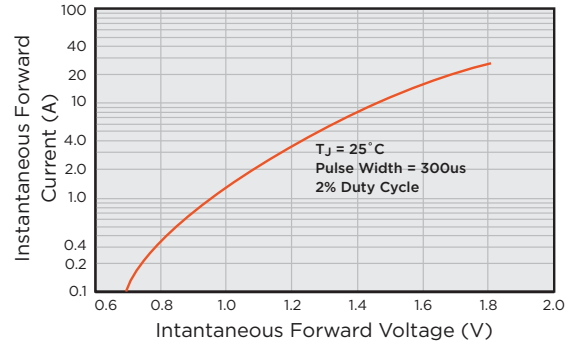


### GRAPHS

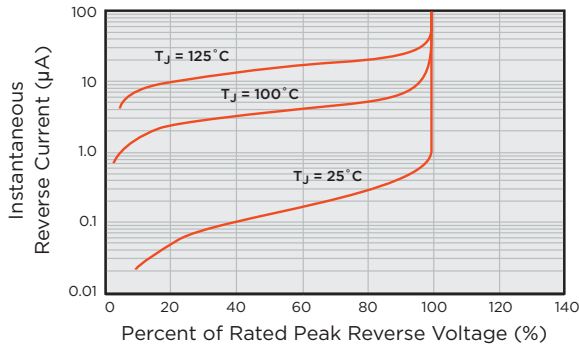
**Fig.1 Forward Current Derating Curve**



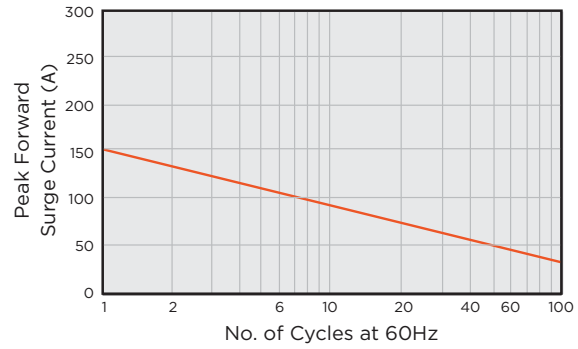
**Fig.2 Typical Instantaneous Forward Characteristics**



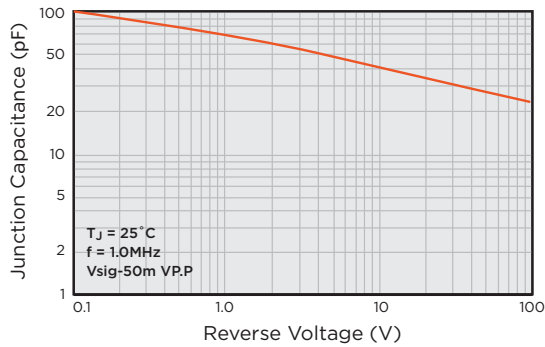
**Fig.3 Typical Reverse Characteristics**



**Fig.4 Max. Non-Repetitive Peak Surge Current**



**Fig.5 Typical Junction Capacitance**



### MOUNTING PAD LAYOUT

