

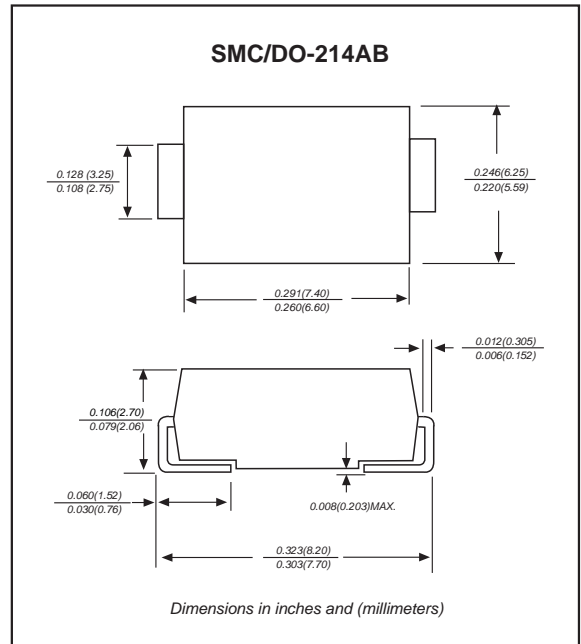
Features

- Plastic package has underwriters laboratories flammability classification 94V-0
- For surface mounted applications in order to optimize board space
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Ultra low forward voltage drop
- Low power losses, high efficiency operation
- High current capability and surge capability
- Low thermal resistance package
- Compliant to Halogen-free

Mechanical data

- **Case:** JEDEC SMC/DO-214AB molded plastic body
- **Terminals:** Solder plated, solderable per J-STD-002
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any

Package outline



Maximum ratings and Electrical Characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current		I_O			10.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rated load	I_{FSM}			120	A
Reverse current	$V_R = 40V, T_A = 25^\circ\text{C}$	I_R			0.2	mA
	$V_R = 40V, T_A = 100^\circ\text{C}$				20	
Thermal resistance (1)	Junction to Ambient	$R_{\theta JA}$		65		$^\circ\text{C/W}$
	Junction to Lead	$R_{\theta JL}$		8		
Storage temperature		T_{STG}	-55		+150	$^\circ\text{C}$

Note1: Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas.

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature $T_J, (^\circ\text{C})$
SS1040S-C	40	28	40	0.60	-55 to +150

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage@ $I_F=8.0A$

Rating and characteristic curves

FIG.1: Typical forward characteristics

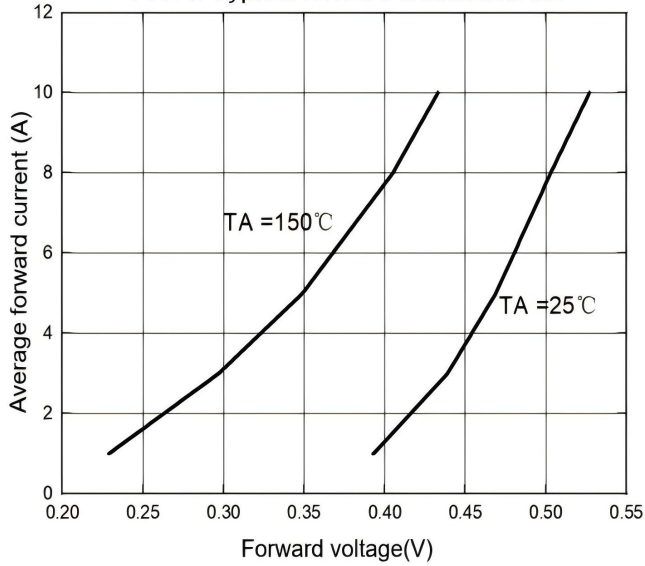
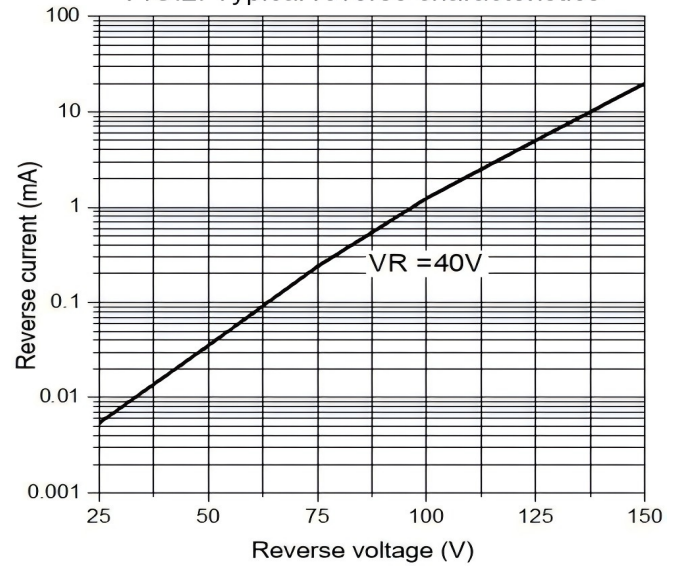




FIG.2: Typical reverse characteristics



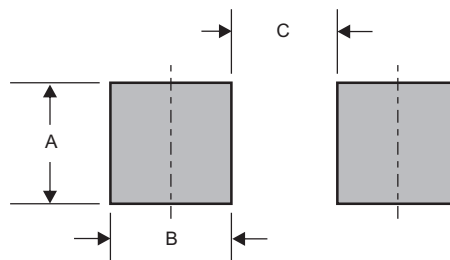
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
SS1040S-C	SS1040S

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMC	0.132 (3.30)	0.100 (2.50)	0.176(4.40)