

### ■ Features

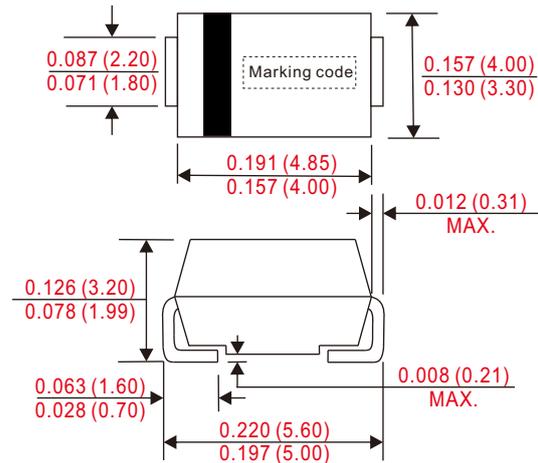
- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex. CSS560BG-A.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

### ■ Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AA / SMB
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : 0.003 ounce, 0.091 gram

### ■ Outline

SMB(DO-214AA)



Dimensions in inches and (millimeters)

### ■ Maximum ratings and electrical characteristics

Rating 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	Conditions	Symbol	CSS560B-A	UNIT
Marking code			CSS560	
Peak repetitive reverse voltage		$V_{RRM}$	60	V
Working peak reverse voltage		$V_{RWM}$		
DC blocking voltage		$V_{RM}$		
Forward rectified current		$I_O$	5	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	200	A
Thermal resistance	Junction to soldering(1)	$R_{\theta JS}$	3	°C/W
	Junction to ambient(2)	$R_{\theta JA}$	60	°C/W
Operating and Storage temperature		$T_J, T_{STG}$	-65 ~ +150	°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage drop	$I_F = 5A, T_J = 25^\circ C$	$V_F$			480	mV
	$I_F = 5A, T_J = 125^\circ C$				420	
	$I_F = 10A, T_J = 25^\circ C$				520	
Reverse current	$V_R = V_{RRM}, T_J = 25^\circ C$	$I_R$			0.5	mA
	$V_R = V_{RRM}, T_J = 125^\circ C$				100	

Note : 1. Theoretical  $R_{\theta JS}$  calculated from the top center of the die straight down to the PCB cathode tab solder junction.  
2. Polyimide PCB, 2oz. Copper.

■ Rating and characteristic curves

Fig. 1 - Pulse Derating Curve

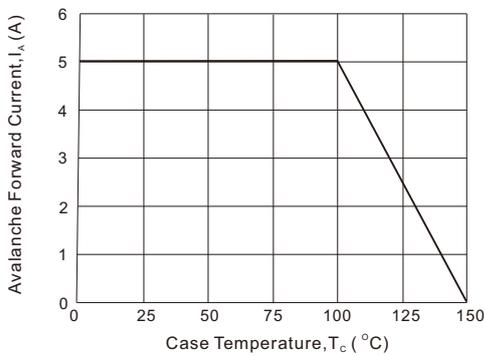


Fig. 2 - Instantaneous Forward Characteristics

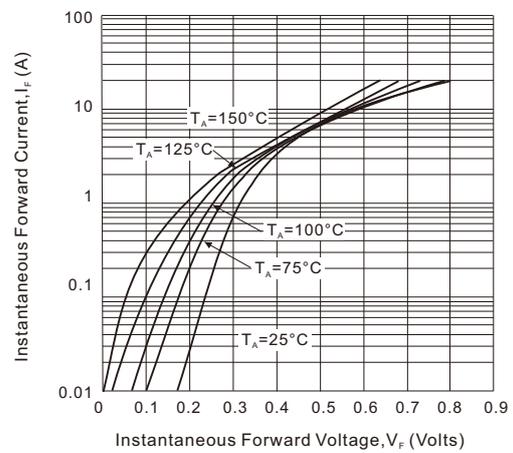
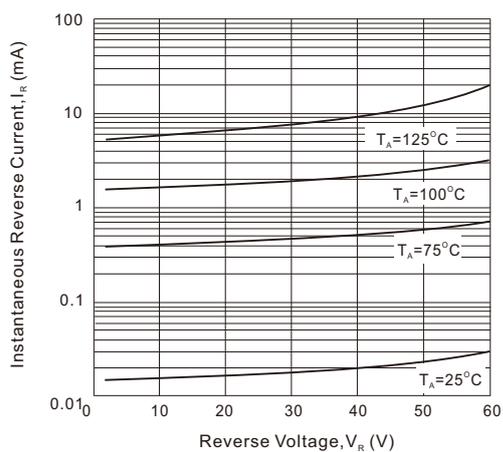
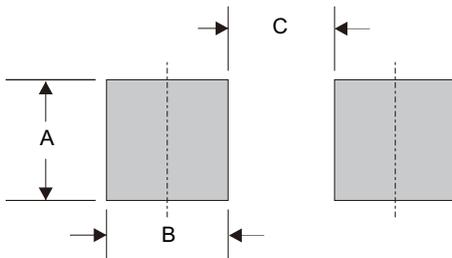


Fig. 3 - Reverse Characteristics



■ SMB foot print



A	B	C
0.091 (2.30)	0.098 (2.50)	0.071 (1.80)

Dimensions in inches and (millimeters)

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