

Main Product Characteristics

$I_{F(AV)}$	5A
V_{RRM}	45V
T_J	150°C
$V_{(TYP)}$	0.36V

■ Features

- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex. CSS545BG-A.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Mechanical data

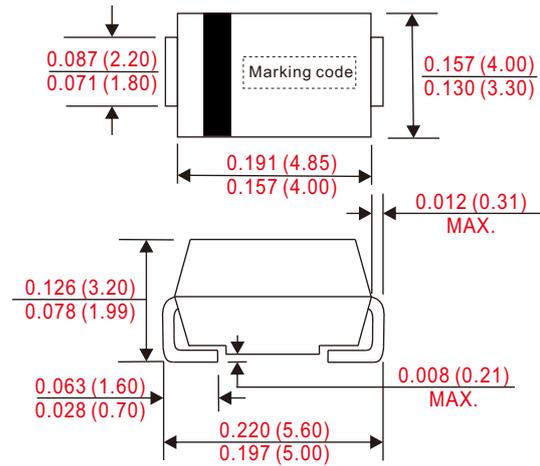
- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AA / SMB
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : 0.003 ounce, 0.091 gram

■ 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%.

■ Outline

SMB(DO-214AA)



Dimensions in inches and (millimeters)

Parameter	Conditions	Symbol	CSS545B-A	UNIT
Marking code			CSS545	
Peak repetitive reverse voltage		V_{RRM}	45	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}	100	A
Thermal resistance	Junction to case	R_{BJC}	30	°C/W
Operating and Storage temperature		T_J, T_{STG}	-55 ~ +150	°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage drop	$I_F = 5A, T_J = 25^\circ C$	V_F			435	mV
	$I_F = 5A, T_J = 125^\circ C$			360		
Reverse current	$V_R = V_{RRM}, T_J = 25^\circ C$	I_R			0.08	mA
	$V_R = V_{RRM}, T_J = 125^\circ C$				25	

Rating and characteristic curves

Fig. 1 - Instantaneous Forward Characteristics

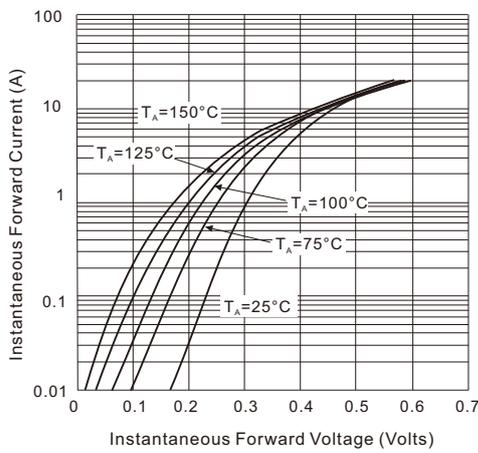


Fig. 2 - Reverse Characteristics

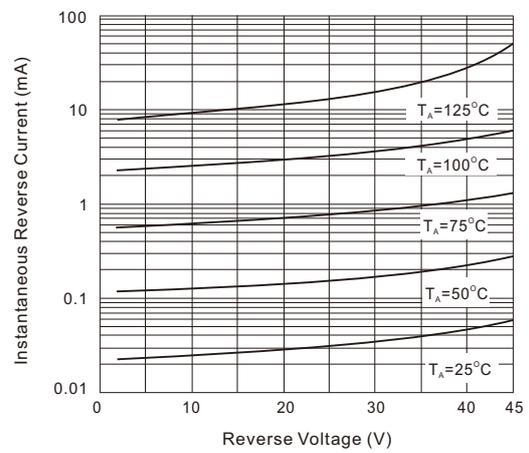
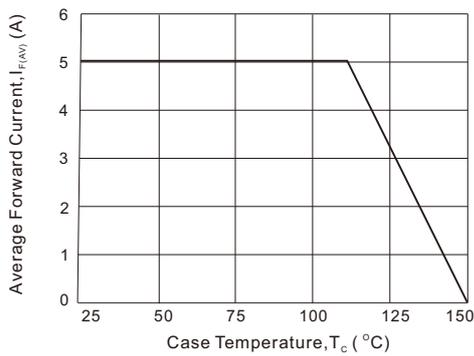
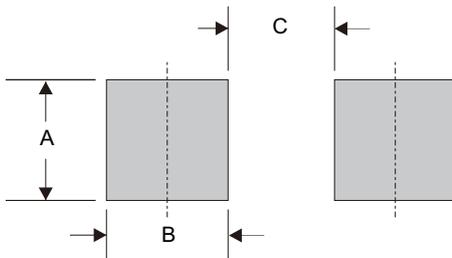


Fig.3 - Forward Current Derating Curve



■ 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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