

### Main Product Characteristics

$I_{F(AV)}$	3A
$V_{RRM}$	100V
$T_J$	150°C
$V_{(TYP)}$	0.51V

### Features

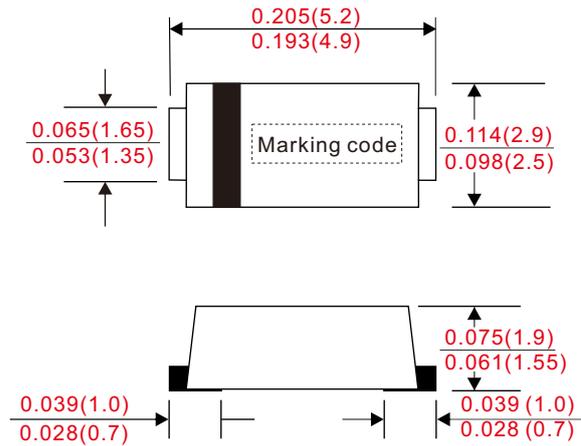
- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex. CSS310ASG-A.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

### Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AC / SMAS
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : Approximated 0.08 gram

### Outline

SMAS(DO-214AC)



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	CSS310ASG-A			UNIT
Marking code			CSS310			
Peak repetitive reverse voltage		$V_{RRM}$	100			V
Working peak reverse voltage		$V_{RWM}$				
DC blocking voltage		$V_{RM}$				
Forward rectified current		$I_o$	3			A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	120			A
Thermal resistance	Junction to case	$R_{\theta JC}$	20			°C/W
Storage temperature		$T_{STG}$	-55 ~ +150			°C
Operating Junction temperature		$T_J$	-55 ~ +150			°C
Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward voltage drop	$I_F = 3A, T_J = 25^\circ C$	$V_F$			670	mV
	$I_F = 3A, T_J = 125^\circ C$			510	570	
Reverse current	$V_R = V_{RRM}, T_J = 25^\circ C$	$I_R$		0.01	0.1	mA
	$V_R = V_{RRM}, T_J = 125^\circ C$				15	

Rating and characteristic curves

Fig. 1 - Instantaneous Forward Characteristics

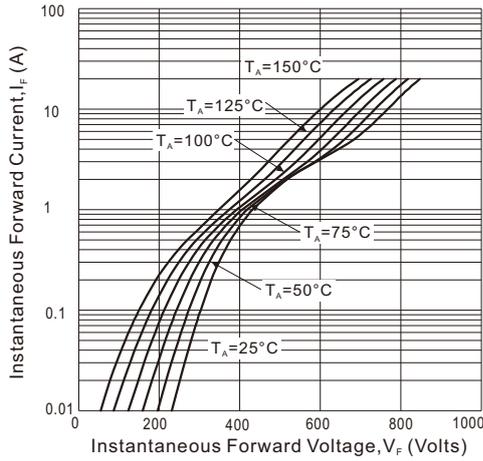


Fig. 2 - Reverse Characteristics

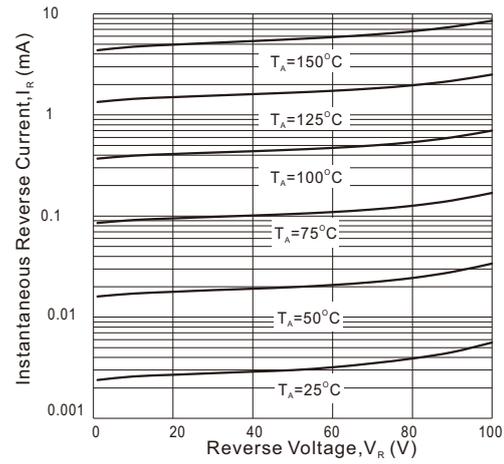


Fig. 3 - Forward Power Dissipation (per diode)

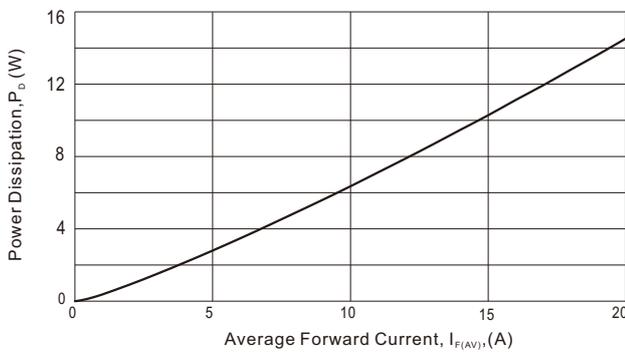


Fig. 4 - Total capacitance VS. Reverse Voltage

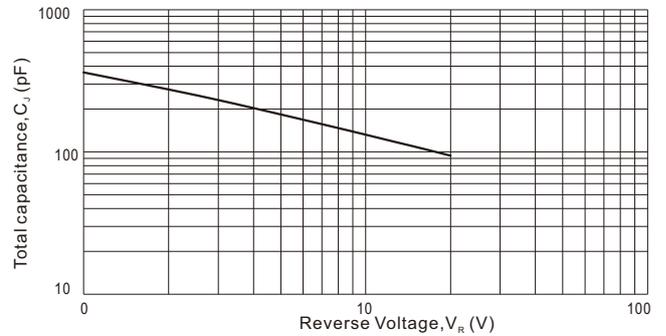
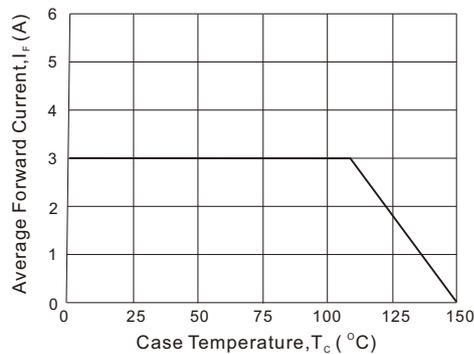
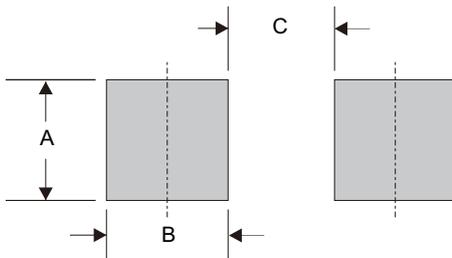


Fig.5 - Pulse Derating Curve



■ SMAS foot print



A	B	C
0.063 (1.60)	0.059 (1.50)	0.110 (2.80)

Dimensions in inches and (millimeters)

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