

### ■ Features

- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex. CSL545ASG-A.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

### ■ Mechanical data

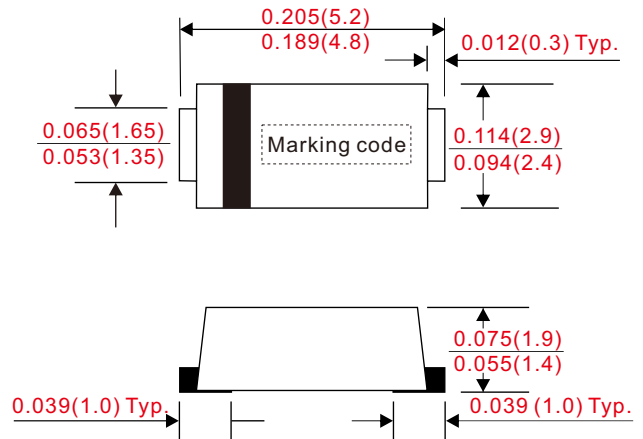
- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AC / SMAS
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : Approximated 0.08 gram

### ■ 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

SMAS(DO-214AC)



Dimensions in inches and (millimeters)

Parameter	Conditions	Symbol	CSL545AS			UNIT	
Marking code			CSL545				
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)	$I_{FSM}$	150			A	
Peak repetitive reverse surge current	2us - 1KHz	$I_{RRM}$	2				
Thermal resistance	Junction to lead(1)	$R_{\theta JL}$	30			°C/W	
Operating and Storage temperature		$T_J, T_{STG}$	-65 ~ +150			°C	
Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT	
Forward voltage drop	$I_F = 1A, T_J = 25^\circ C$	$V_F$		340		mV	
	$I_F = 2.5A, T_J = 25^\circ C$			390			
	$I_F = 5A, T_J = 25^\circ C$				470		
	$I_F = 1A, T_J = 125^\circ C$			230			
	$I_F = 2.5A, T_J = 125^\circ C$				320		
	$I_F = 5A, T_J = 125^\circ C$				440		470
Reverse current	$V_R = V_{RRM} T_J = 25^\circ C$	$I_R$		0.054	0.3	mA	
	$V_R = V_{RRM} T_J = 125^\circ C$			10	35		

Note : 1.FR-4 PCB, 2oz.Copper.

■ Rating and characteristic curves

Fig. 1 - Pulse Derating Curve

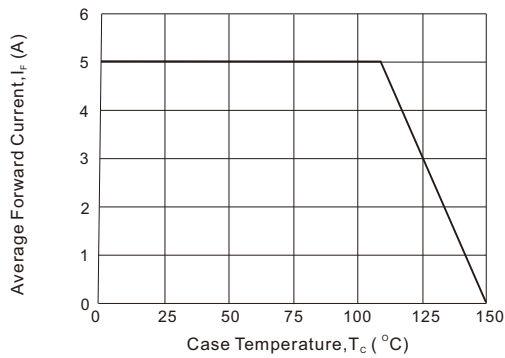


Fig. 2 - Instantaneous Forward Characteristics

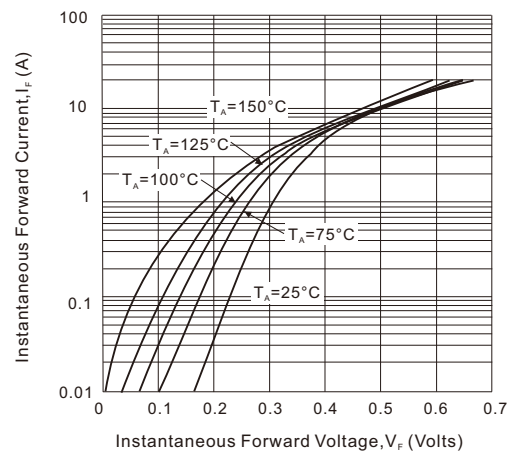
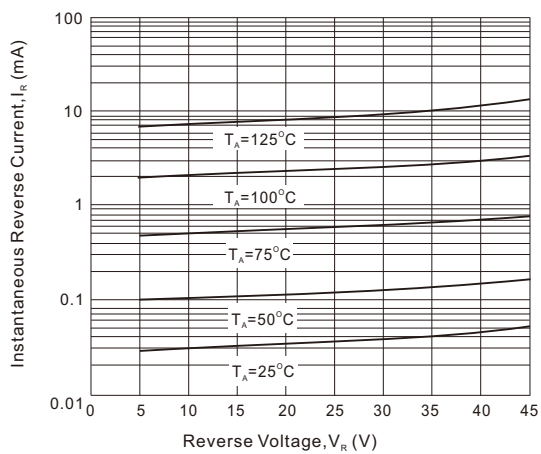
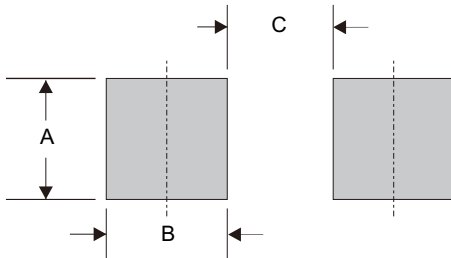


Fig. 3 - Reverse Characteristics



■ 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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