

Main Product Characteristics

$I_{F(AV)}$	5A
V_{RRM}	45V
T_J	150°C
$V_{(Typ)}$	0.37V

■ Features

- Low profile surface mounted application in order to optimize board space.
- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex.CSL545MASG-A.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Mechanical data

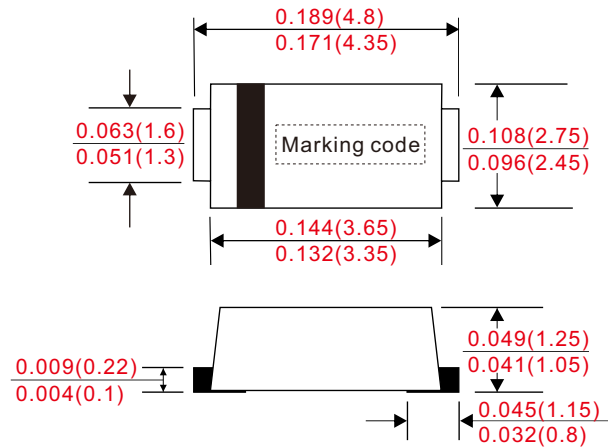
- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AC / MINI SMAS
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : Approximated 0.04 gram

■ 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

MINI SMAS(DO-214AC)



Dimensions in inches and (millimeters)

Parameter	Conditions	Symbol	CSL545MAS-A			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			A
Thermal resistance	Junction to case	R_{BJC}	25			°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			470	mV
	$I_F = 5A, T_J = 125^\circ C$			370	400	
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	

Rating and characteristic curves

Fig.1 - Forward Current Derating Curve

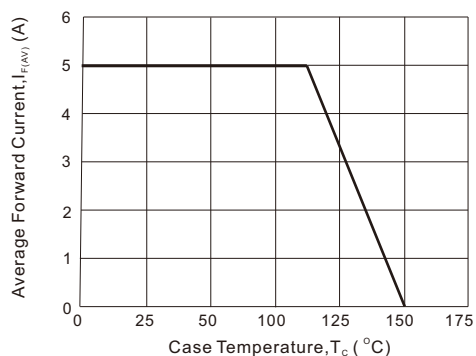


Fig. 2 - Instantaneous Forward Characteristics

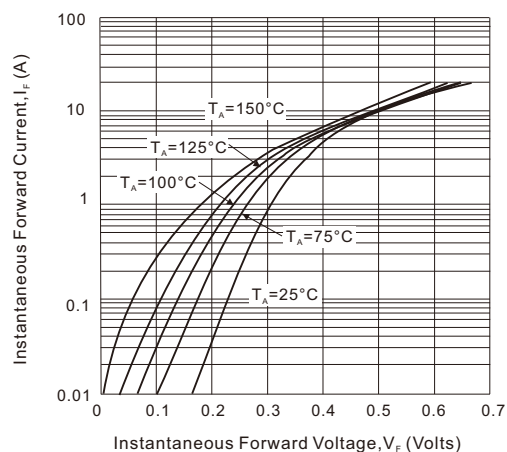
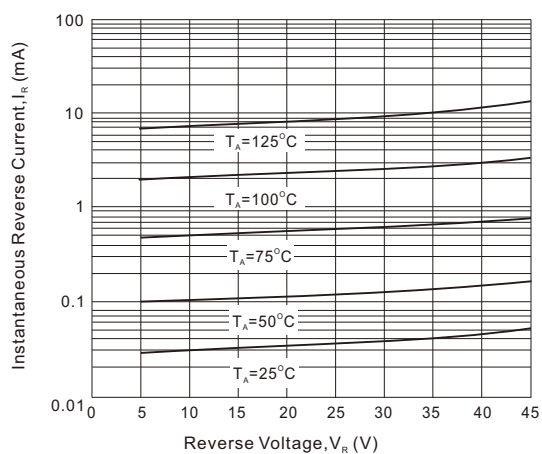
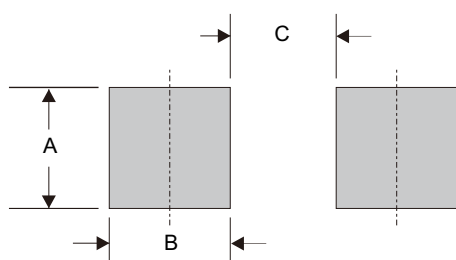


Fig. 3 - Reverse Characteristics



REVERSE VOLTAGE, (V)

■ MINI 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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