

■ Features

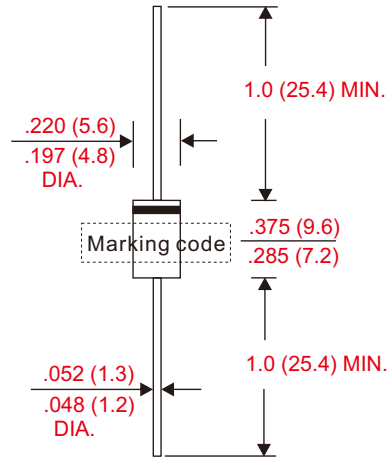
- Axial lead type devices for through hole design.
- Low forward voltage drop.
- Excellent high temperature stability.
- Fast switching capability.
- Suffix "G" indicates Halogen-free part, ex. CSR1045G-A.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, DO-201AD / DO-27
- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guranteed
- Polarity : Color band denotes cathode end
- Weight : Approximated 1.10 gram

■ Outline

DO-27(DO-201AD)



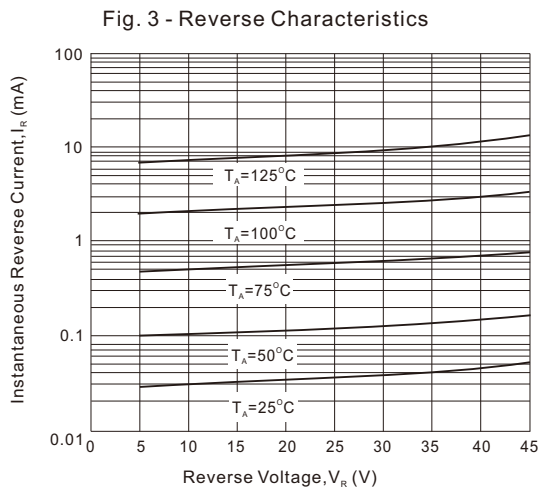
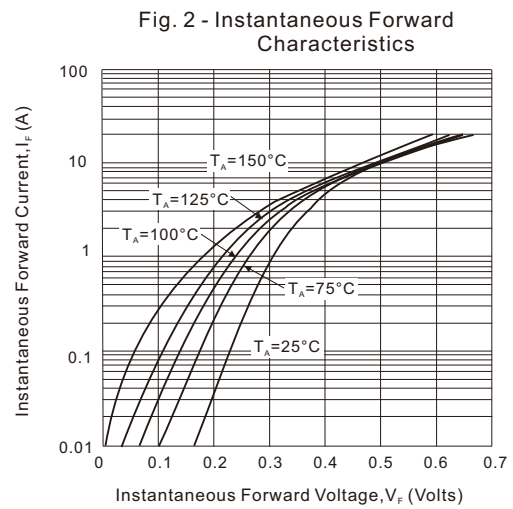
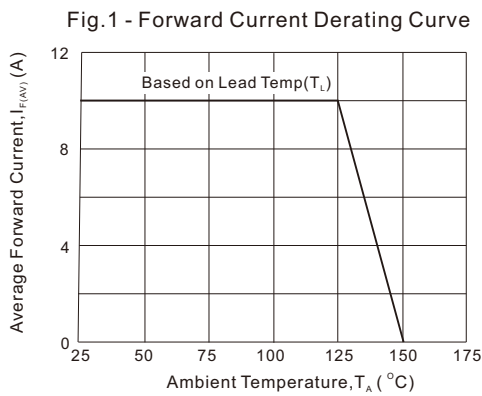
Dimensions in inches and (millimeters)

■ 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	CSR1045-A			UNIT
Marking code			CSR1045			
Peak repetitive reverse voltage		V_{RRM}	45			V
Working peak reverse voltage		V_{RWM}				
DC blocking voltage		V_{RM}				
RMS reverse voltage		$V_{R(RMS)}$	32			V
Forward rectified current		I_O	10			A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	180			A
Thermal resistance	Junction to ambient	$R_{\theta JA}$	54			°C/W
	Junction to case	$R_{\theta JL}$	18			°C/W
Operating and Storage temperature		T_J, T_{STG}	-65 ~ +150			°C
Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Reverse breakdown voltage	$I_R = 0.5mA$	$V_{(BR)R}$	45			V
Forward voltage drop	$I_F = 8A, T_J = 25^\circ C$	V_F			510	mV
	$I_F = 10A, T_J = 25^\circ C$				550	
	$I_F = 10A, T_J = 125^\circ C$				530	
Reverse current	$V_R = V_{RRM}, T_J = 25^\circ C$	I_R			0.45	mA
	$V_R = V_{RRM}, T_J = 100^\circ C$				18	
	$V_R = V_{RRM}, T_J = 125^\circ C$				100	

Rating and characteristic curves



- CITC reserves the right to make changes to this document and its products and specifications at any time without notice.
- Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
- CITC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does CITC assume any liability for application assistance or customer product design.
- CITC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.
- No license is granted by implication or otherwise under any intellectual property rights of CITC.
- CITC products are not authorized for use as critical components in life support devices or systems without express written approval of CITC.