

Spec. No. : C473LD Issued Date : 2009.11.20 Revised Date : 2014.12.04

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# 3.0Amp Schottky Barrier Rectifiers Reverse Voltage 70V to 100V Forward Current 3A

## SB370 thru SB3B0

#### **Features**

- Metal-semiconductor junction with guard ring.
- Epitaxial construction
- Low forward voltage drop
- High current capability

#### **Mechanical Data**

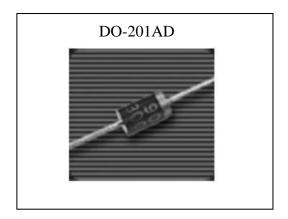
Case : Molded plastic DO-201ADEpoxy : UL94V-0 rate flame retardant

• Terminals: Solderable per MIL-STD-202 method 208 guaranteed

• Polarity: Color band denotes cathode end.

Mounting Position : Any.Weight: 0.041 oz., 1.15 gram

#### **Outline**



#### **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%)

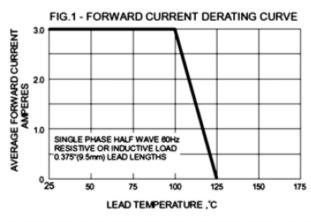
Parameter		Symbol	Туре				Linita
			SB370	SB380	SB390	SB3B0	Units
Maximum repetitive peak reverse volta	V <sub>RRM</sub>	70	80	90	100	V	
Maximum RMS voltage	V <sub>RMS</sub>	49	56	63	70	V	
Maximum DC blocking voltage	VDC	70	80	90	100	V	
Mariana 6 1 1 1 2A	T <sub>J</sub> =25°C	Vr	0.79				V
Maximum forward voltage at IF=3A	T <sub>J</sub> =100°C	$V_{\mathrm{F}}$	0.69				
Maximum average forward rectified current @		IF(AV)	3				A
0.375"(9.5mm) lead length, T <sub>L</sub> =100°C	Ŭ						
Peak forward surge current @8.3ms sin wave superimposed on rated load (JED	IFSM	100				A	
Maximum DC reverse current at rated	T <sub>J</sub> =25°C	$I_R$	0.5				mA
DC blocking voltage	T <sub>J</sub> =100°C	1K	20				
Typical thermal resistance, junction to l	R <sub>θ</sub> JL	25				°C/W	
Typical junction capacitance @ f=1MH 4V DC reverse voltage	Сл	90			pF		
Operating junction temperature range	TJ	-55 ~ +125			$^{\circ}\!\mathbb{C}$		
Storage temperature range	Tstg	-55 ~ +150				$^{\circ}\!\mathbb{C}$	

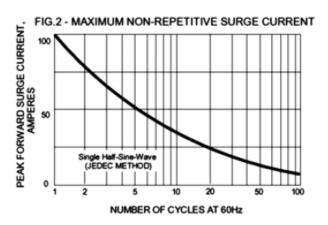


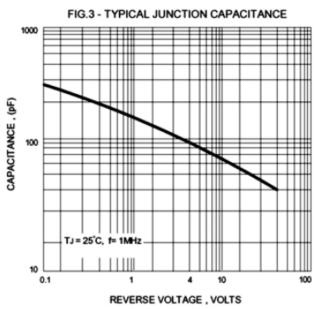
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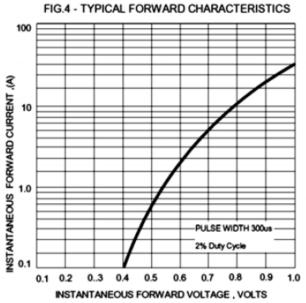
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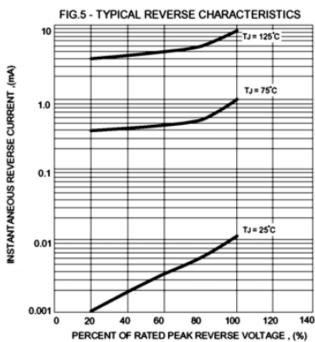
#### **Characteristic Curves**









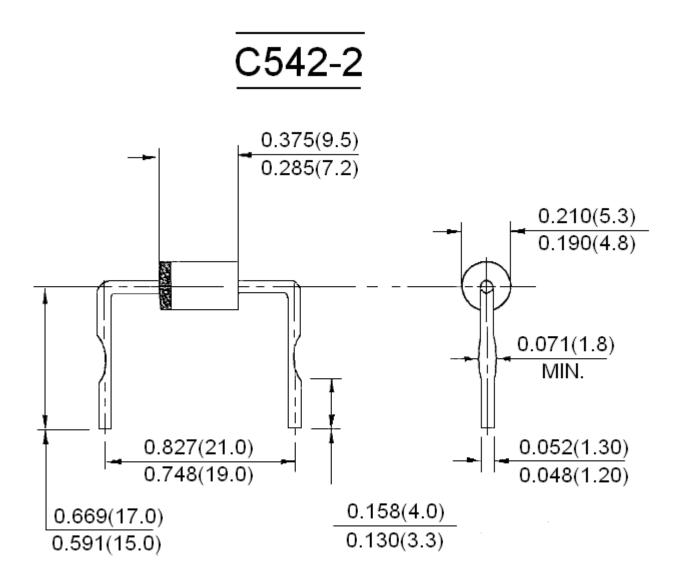




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### **Forming Dimension**



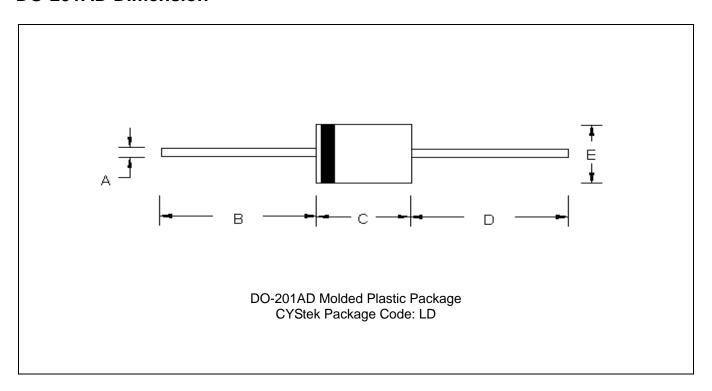
Dimensions in inches(millimeters)



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#### **DO-201AD Dimension**



DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.	וווט	Min.	Max.	Min.	Max.
Α	φ0.048	φ0.052	φ1.20	φ1.30	D	1.000	-	25.40	-
В	1.000	-	25.40	-	Е	φ0.190	φ0.220	φ4.80	φ5.60
С	0.285	0.375	7.20	9.50					

Notes: 1.Controlling dimension: millimeters.

2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material. 3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

#### Material:

- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed.
- Mold Compound : Epoxy resin family, flammability solid burning class: UL94V-0

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