## CYStech Electronics Corp.

#### Spec. No. : C777LG Issued Date : 2011.08.16 Revised Date : Page No. : 1/3

## Schottky Barrier Rectifiers Reverse Voltage 70V to 100V Forward Current 2.0 Amperes

# SB270 thru SB2B0

#### Features

• Metal semiconductor junction with guard ring

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- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage, high frequency inverters, free wheeling,
- and polarity protection applications

## **Mechanical Characteristics:**

- •Case: JEDEC DO-204AC(DO-15) molded plastic
- •Terminals: Tin plated axial leads, solderable per MIL-STD-750, method 2026
- •Polarity: Color band denotes cathode
- •Mounting position: Any
- •Weight : 0.014oz., 0.39grams

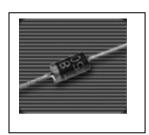
#### **Maximum Ratings and Electrical Characteristics**

(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				Units
			SB270	SB280	SB290	SB2B0	Units
Maximum repetitive peak reverse voltage			70	80	90	100	V
Maximum RMS voltage			49	56	81	70	V
Maximum DC blocking voltage			70	80	90	100	V
Maximum forward voltage at 2A	TJ=25°C	VF	0.79 0.69				V
	TJ=100°C	V F					
Maximum average forward rectified current @ TL=100°C			2				А
Peak forward surge current @8.3ms single half sine wave superimposed on rated load (JEDEC method)			60				А
Maximum DC reverse current at rated DC blocking voltage	TJ=25°C	IR	0.5				mA
	TJ=100°C		10				
Typical thermal resistance (Note 1)	Røja	20			°C/W		
Typical junction capacitance (Note 2)			50			pF	
Operating junction temperature range			-55 ~ +125			°C	
Storage temperature range			-55 ~ +150			°C	

Note: 1.Thermal resistance, junction to ambient.

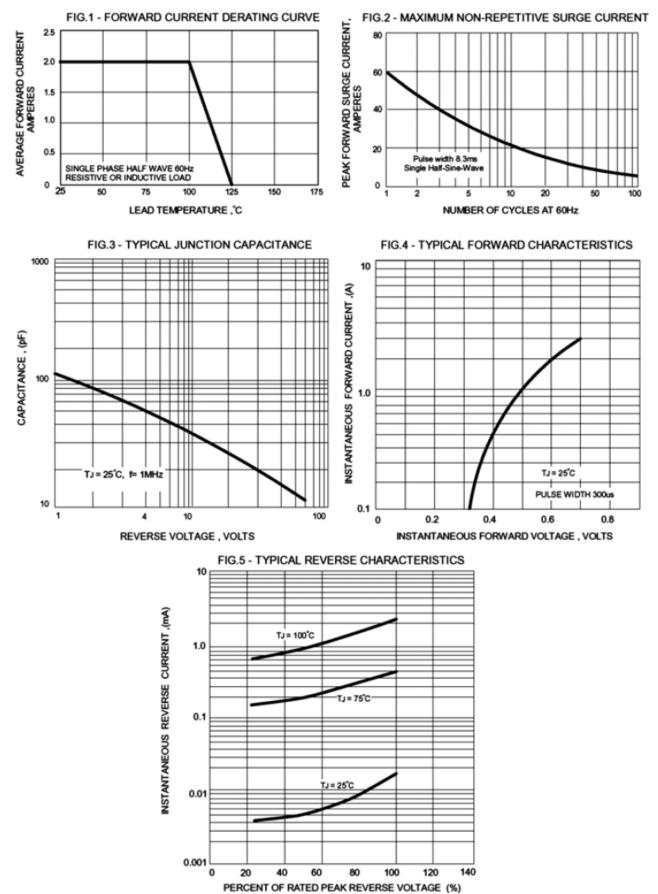
2.Measured at1.0MHz and applied reverse voltage of 4.0VDC





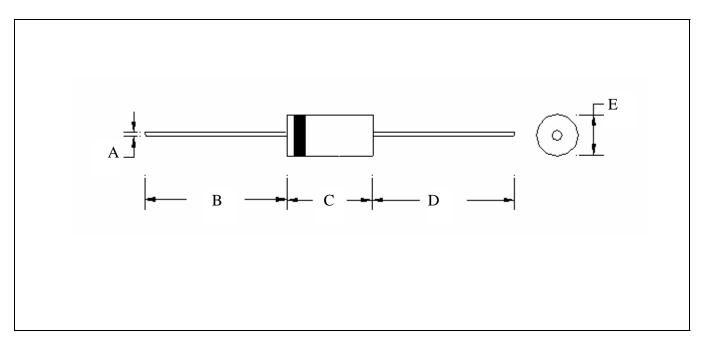
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#### **Ratings and Characteristic Curves**





#### DO-204AC(DO-15) Dimension



									*:Typical		
DIM	Inches		Millimeters		DIM	Inches		Millimeters			
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.		
Α	ф0.028	φ0.034	φ0.70	φ <b>0.90</b>	D	1.000	-	25.40	-		
В	1.000	-	25.40	-	E	φ0.104	φ0.140	φ <b>2.6</b> 0	φ <b>3.6</b> 0		
С	0.2300	0.3000	5.80	7.60							
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.											

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