



2.0Amp Schottky Barrier Diodes

CSR220-2100LB Series

Features

- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- Plastic material used carries Underwriters Laboratory Flammability Classification 94V-0
- High reliability
- High surge capability
- Low forward voltage drop
- Epitaxial construction

Mechanical Data

- Case: DO-41 Molded plastic
- Lead: axial leads, solderable per MIL-STD-202 method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.34 grams

Maximum Ratings and Electrical Characteristics

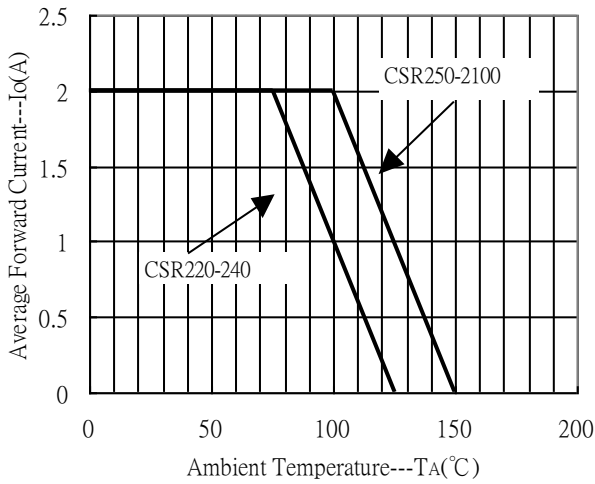
(Rating at 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%)

Parameter	Symbol	Type							Units
		CSR 220	CSR 230	CSR 240	CSR 250	CSR 260	CSR 280	CSR 2100	
Repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	V _R	20	30	40	50	60	80	100	V
Maximum instantaneous forward voltage, I _F =2A (Note 1)	V _F	0.55		0.7		0.85			V
Maximum Average forward rectified current	I _O	2							A
Peak forward surge current @8.3ms single half sine wave superimposed on rated load (JEDEC method)	I _{FSM}	50							A
Maximum DC reverse current V _R =V _{RRM} , T _A =25°C (Note 1) V _R =V _{RRM} , T _A =100°C (Note 1)	I _R	2 20							mA mA
Maximum thermal resistance, Junction to ambient (Note)	R _{th,JA}	35 (typ)							°C/W
Diode junction capacitance @ f=1MHz and applied 4V reverse voltage	C _J	170 (typ)							pF
Storage temperature	T _{stg}	-65 ~ +150							°C
Operating temperature	T _J	-65 ~ +125			-65 ~ +150				°C

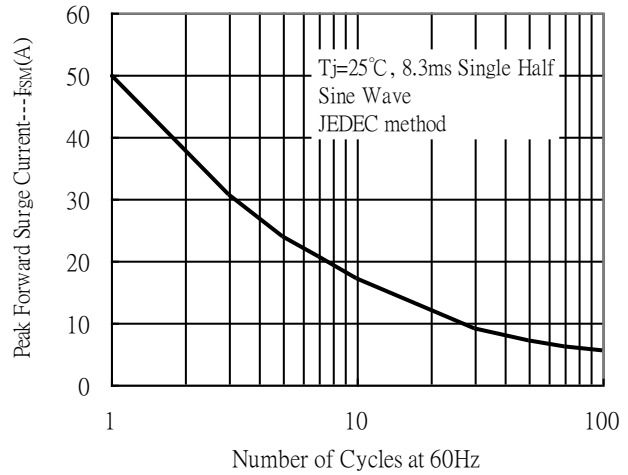
Notes : 1. Thermal resistance junction to ambient vertical PCB mounting 0.5”(12.7mm) lead length.

Characteristic Curves

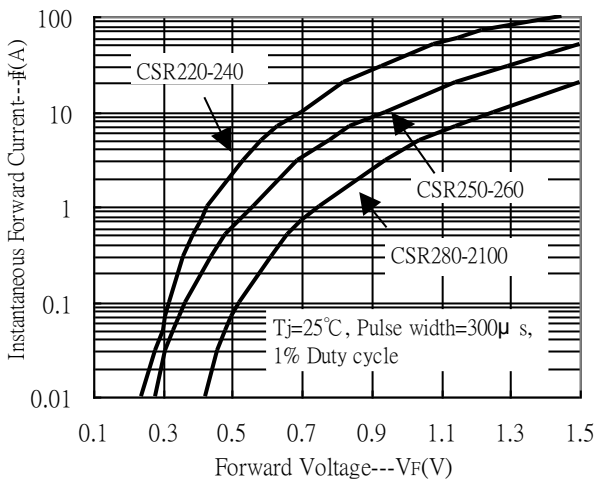
Forward Current Derating Curve



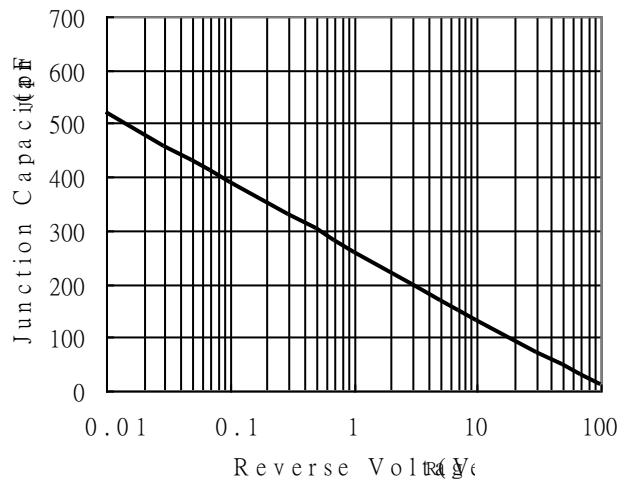
Maximum Non-Repetitive Forward Surge Current



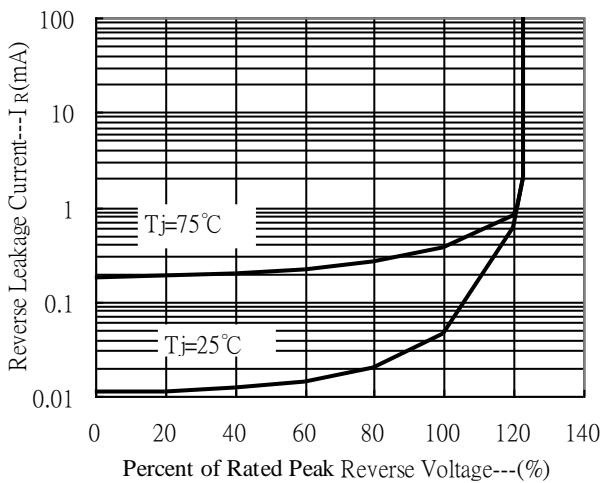
Forward Current vs Forward Voltage



Junction Capacitance vs

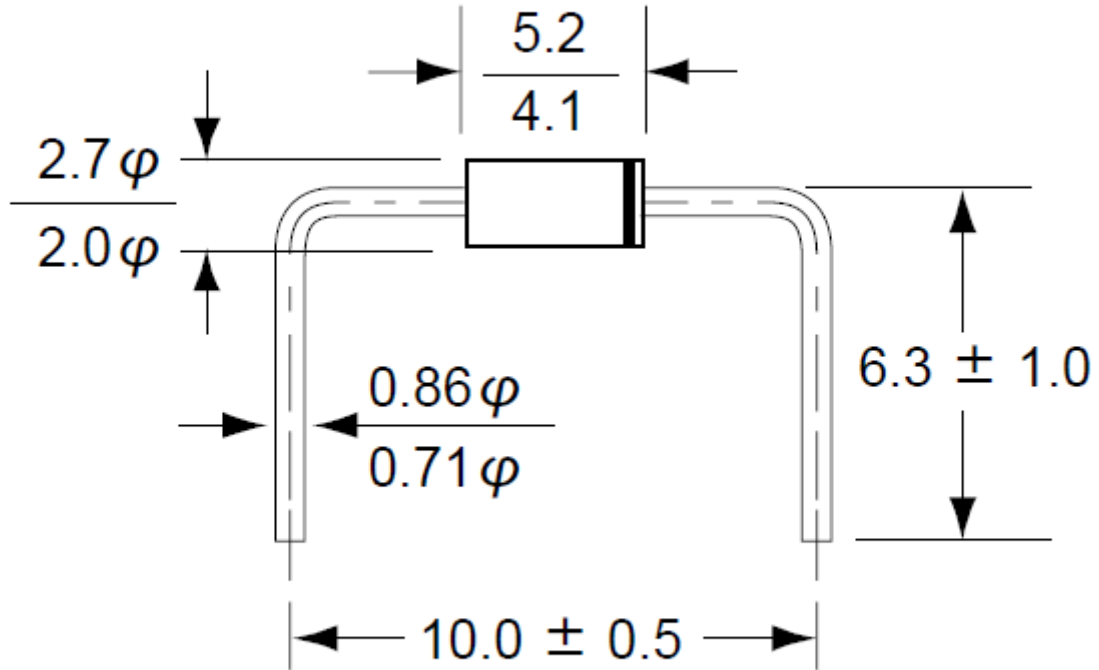


Reverse Leakage Current vs Reverse Voltage

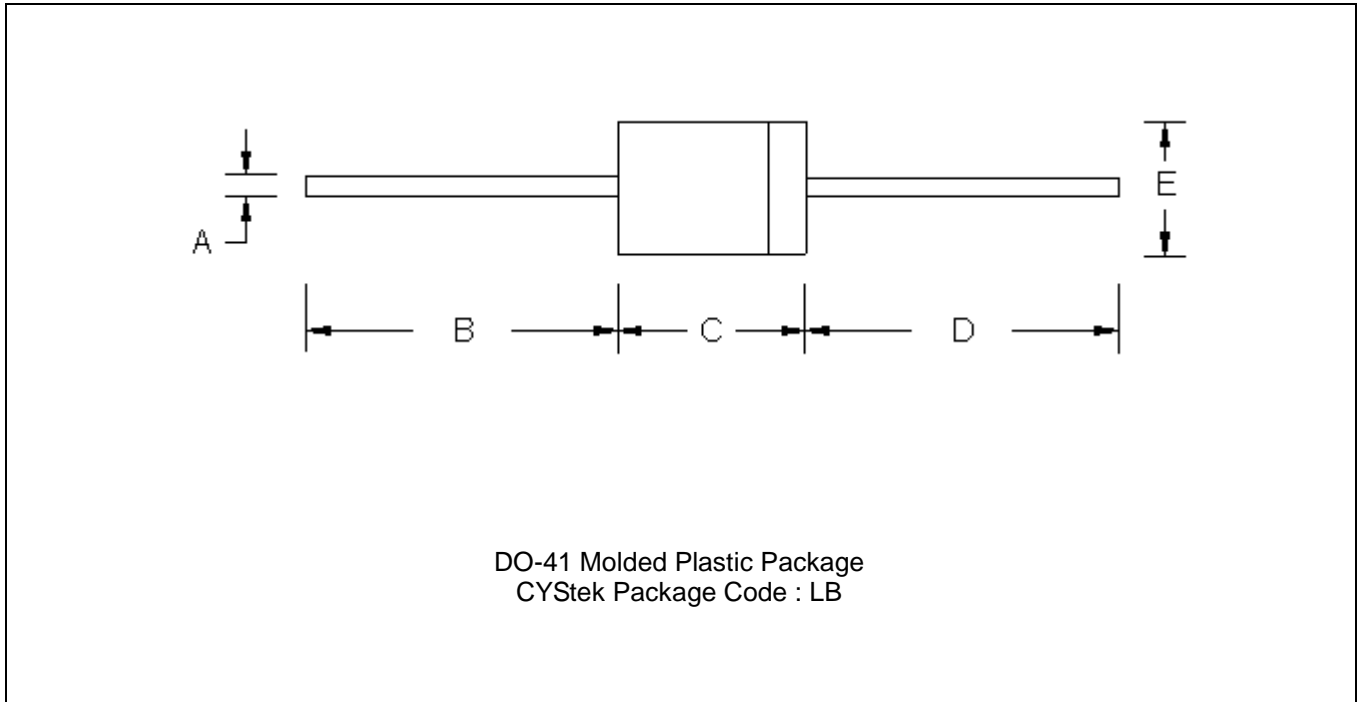


Forming Dimension

LB01



DO-41 Dimension



*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0280	0.0340	0.71	0.86	D	1.0000	-	25.40	-
B	1.0000	-	25.40	-	E	0.0800	0.1070	2.00	2.70
C	0.1600	0.2050	4.10	5.20					

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 : 42 Alloy ; solder plating
- Mold Compound : Epoxy resin family, flammability solid burning class:UL94V-0

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