



# CBD20120LCT

## LOW VF SCHOTTKY RECTIFIER

**VOLTAGE** 120 Volts **CURRENT** 20 Amperes

### FEATURES

- Low forward voltage drop, low power losses
- High efficiency operation
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

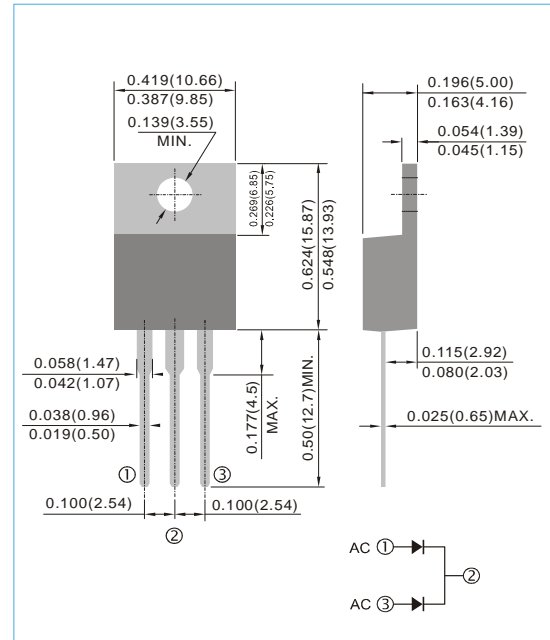
Case : TO-220AB, Plastic

Terminals : Solderable per MIL-STD-750, Method 2026

Weight: 0.0655 ounces, 1.859 grams.

### TO-220AB

Unit : inch(mm)



### MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

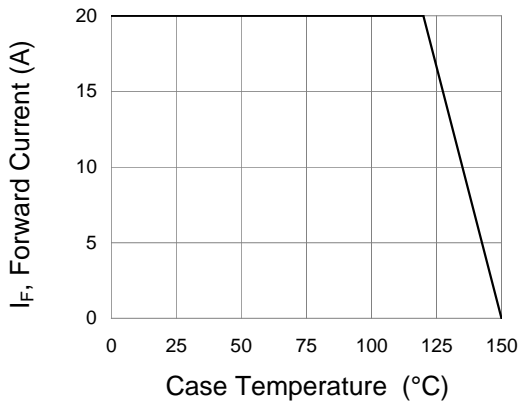
PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	120	V
Maximum rms voltage	V <sub>RMS</sub>	84	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	20 10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200	A
Typical thermal resistance	R <sub>θJC</sub>	2.0	°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to + 150	°C
Storage temperature range	T <sub>STG</sub>	-55 to + 150	°C

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

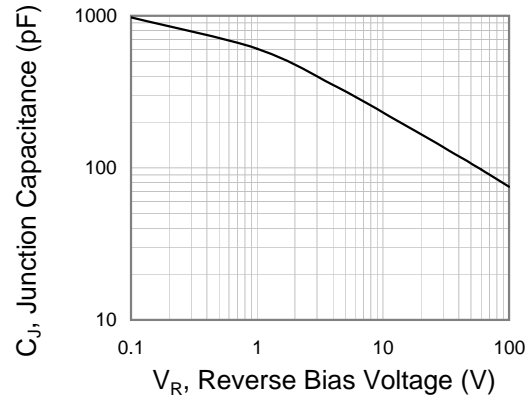
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage per diode	V <sub>BR</sub>	I <sub>R</sub> =1.0mA	120	-	-	V
Instantaneous forward voltage per diode	V <sub>F</sub>	I <sub>F</sub> =5A T <sub>J</sub> =25°C	-	0.62	-	V
		I <sub>F</sub> =10A T <sub>J</sub> =25°C	-	0.79	0.90	V
		I <sub>F</sub> =5A T <sub>J</sub> =125°C	-	0.52	-	V
		I <sub>F</sub> =10A T <sub>J</sub> =125°C	-	0.62	0.72	V
Reverse current per diode	I <sub>R</sub>	V <sub>R</sub> =90V	-	14	-	μA
		V <sub>R</sub> =120V T <sub>J</sub> =25°C	-	-	400	μA
		V <sub>R</sub> =120V T <sub>J</sub> =125°C	-	20	50	mA



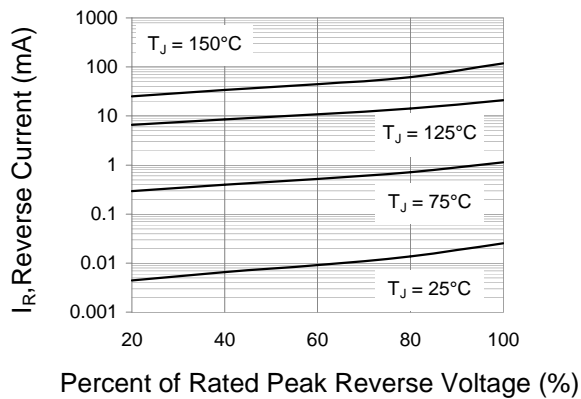
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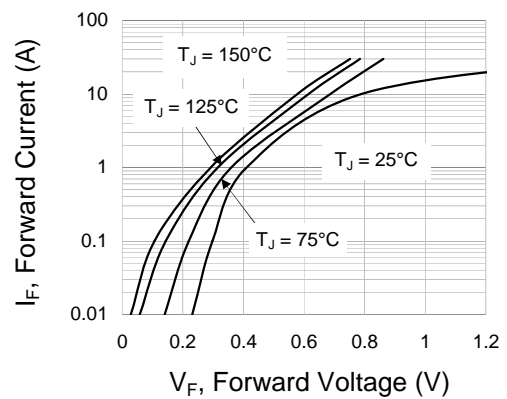
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**