



# CBD10120LCT

## LOW VF SCHOTTKY RECTIFIER

**VOLTAGE** 120 Volts **CURRENT** 10 Amperes

### FEATURES

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

### MECHANICAL DATA

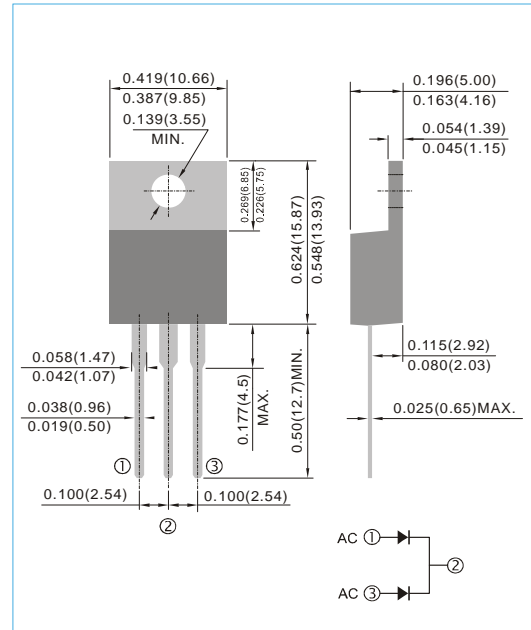
Case : TO-220AB, Plastic

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

Weight: 0.0655 ounces, 1.859 grams.

### TO-220AB

Unit : inch(mm)



### MAXIMUM RATINGS( $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	120	V
Maximum average forward rectified current	$I_{F(AV)}$	10 5	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	125	A
Typical thermal resistance per diode	$R_{\theta JC}$	2.2	$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	-55 to + 150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to + 150	$^\circ\text{C}$

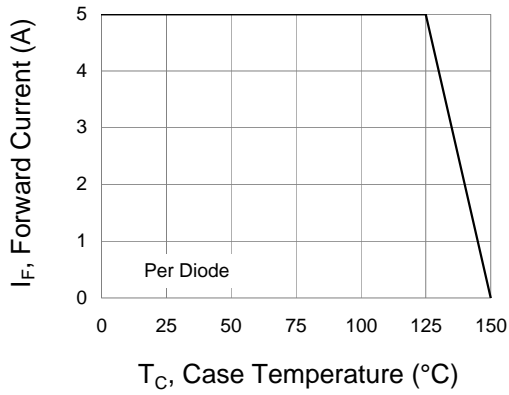
### ELECTRICAL CHARACTERISTICS( $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage per diode	$V_{BR}$	$I_R=1\text{mA}$	120	-	-	V
Instantaneous forward voltage per diode	$V_F$	$I_F=1\text{A}$	-	0.48	-	V
		$I_F=2\text{A}$	-	0.57	-	V
		$I_F=5\text{A}$	-	0.71	0.75	V
Instantaneous forward voltage per diode	$V_F$	$I_F=1\text{A}$	-	0.39	-	V
		$I_F=2\text{A}$	-	0.47	-	V
		$I_F=5\text{A}$	-	0.57	-	V
Reverse current per diode	$I_R$	$V_R=96\text{V}$	-	2	-	$\mu\text{A}$
		$V_R=120\text{V}$	$T_J=25^\circ\text{C}$	-	-	30
		$T_J=125^\circ\text{C}$	-	3.68	-	mA

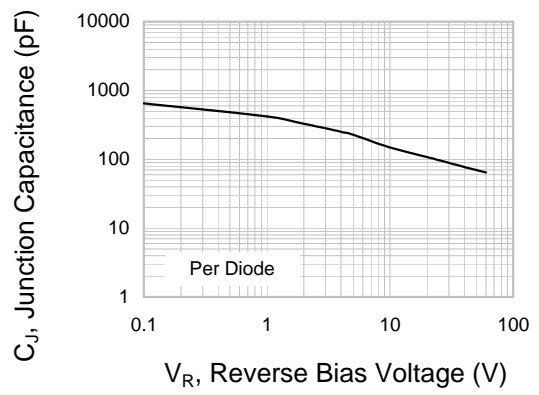
Note : 1. Mounted on infinite heatsink.



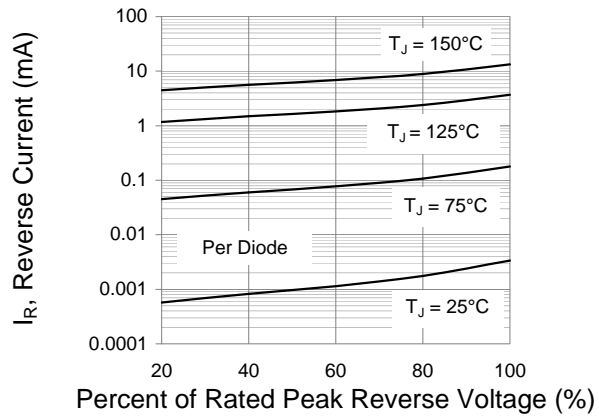
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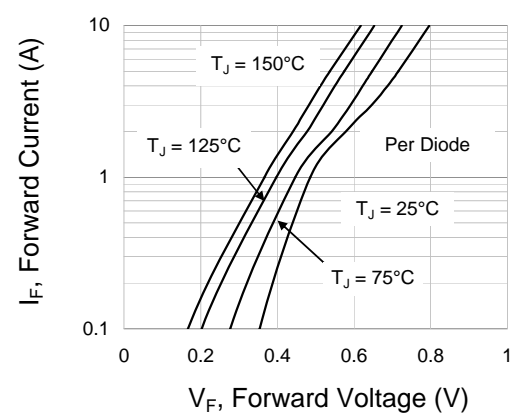
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**

PRELIMINARY