

CBD20100LCT

LOW VF SCHOTTKY RECTIFIER

VOLTAGE 100 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

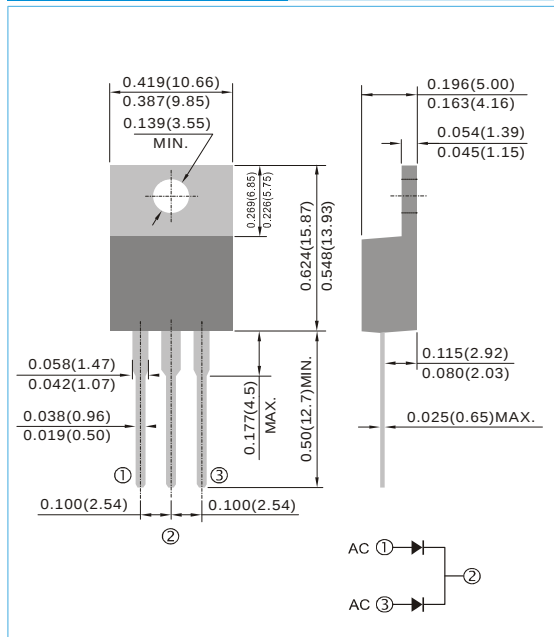
Case : TO-220AB, Plastic

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

Weight: 0.0655 ounces, 1.859 grams.

TO-220AB

Unit : inch(mm)



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	100	V
Maximum average forward rectified current	$I_{F(AV)}$	20 10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode	I_{FSM}	200	A
Typical thermal resistance	$R_{\theta JA}$ $R_{\theta JC}$	70 2.5	$^{\circ}\text{C/W}$
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	TYP.	MAX.	UNIT
Breakdown voltage per diode	V_{BR}	$I_R=1.0\text{mA}$	100	-	V
Instantaneous forward voltage per diode	V_F	$I_F=3\text{A}$	0.50	-	V
		$I_F=5\text{A}$	0.60	-	
		$I_F=10\text{A}$	0.76	0.80	
		$I_F=3\text{A}$	0.46	-	V
Reverse current per diode	I_R	$I_F=5\text{A}$	0.54	-	
		$I_F=10\text{A}$	0.63	0.66	
		$V_R=70\text{V}$	25	-	μA
		$V_R=100\text{V}$	-	400	μA
		$T_J=25^{\circ}\text{C}$	25	35	mA
		$T_J=125^{\circ}\text{C}$			

Note : 1. Mounted on heatsink (7.7cm x 7.7cm x 2pec) copper and areas.

2. Minimum pad for each lead on board.

CBD20100LCT

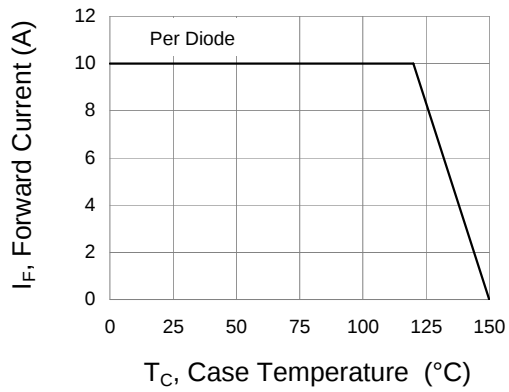


Fig.1 Forward Current Derating Curve

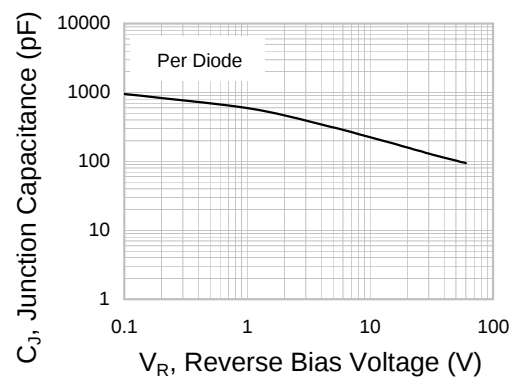


Fig.2 Typical Junction Capacitance

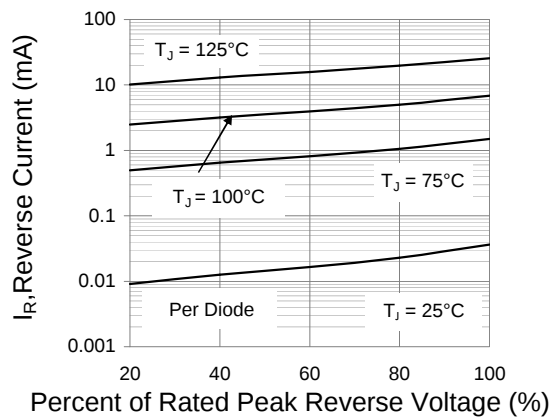


Fig.3 Typical Reverse Characteristics

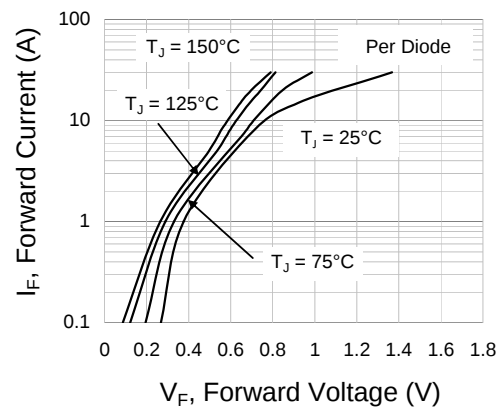


Fig.4 Typical Forward Characteristics