CBD40120LCT

LOW VF SCHOTTKY RECTIFIER

VOLTAGE	120 Volts	CURRENT	40 Amperes

FEATURES

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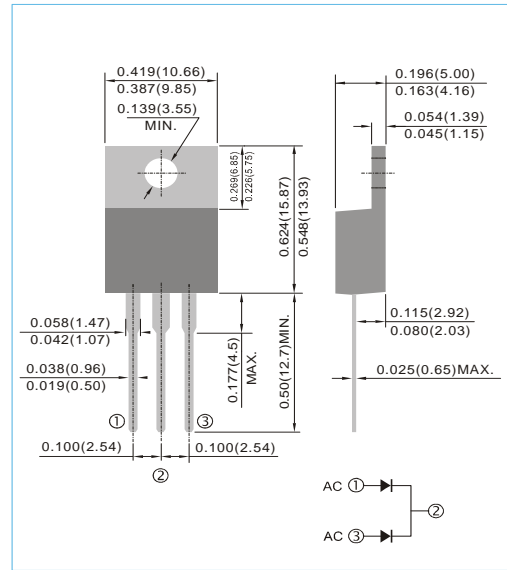- In compliance with EU RoHS 2002/95/EC directives

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=25ºC unless otherwise noted)

PARAMETER		SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage		V_{RRM}	120	V
Maximum rms voltage		V_{RMS}	85	V
Maximum dc blocking voltage		V_R	120	V
Maximum average forward rectified current	per device per diode	$I_{F(AV)}$	40 20	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	per diode	I_{FSM}	250	A
Typical thermal resistance	(Note 1)	$R_{\Theta JC}$	2.5	ºC /W
Operating junction temperature range		T_J	-55 to + 150	ºC
Storage temperature range		T_{STG}	-55 to + 150	ºC

Note : 1. Mounted on infinite heatsink.

ELECTRICAL CHARACTERISTICS(T_A=25ºC unless otherwise noted)

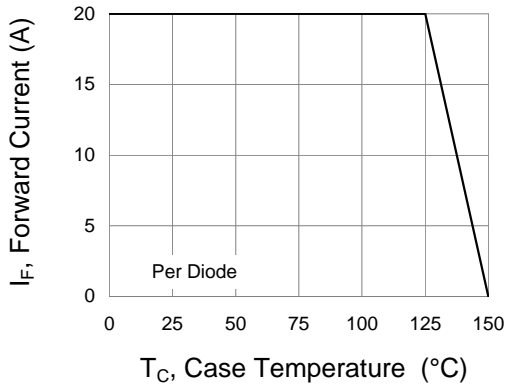| PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Breakdown voltage per diode	V_{BR}	I_R=1mA		120	-	-	V
Instantaneous forward voltage per diode	V_F	I_F=5A I_F=10A I_F=20A	T_J=25ºC	- - -	0.59 0.7 0.8	- - 0.85	V
		I_F=5A I_F=10A I_F=20A	T_J=125ºC	- - -	0.49 0.57 0.67	- - -	V
Reverse current per diode	I_R	V_R=96V		-	6.31	-	μA
		V_R=120V	T_J=25ºC T_J=125ºC	- -	- 9	50 -	μA mA

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Fig.1 Forward Current Derating Curve

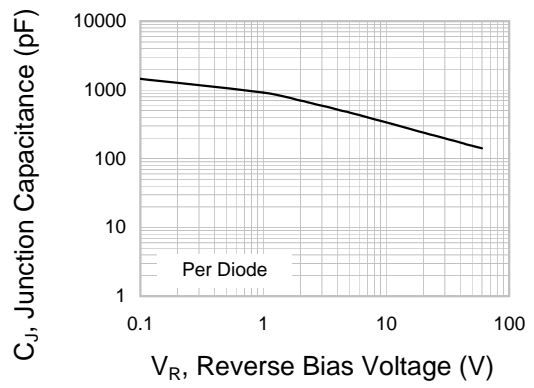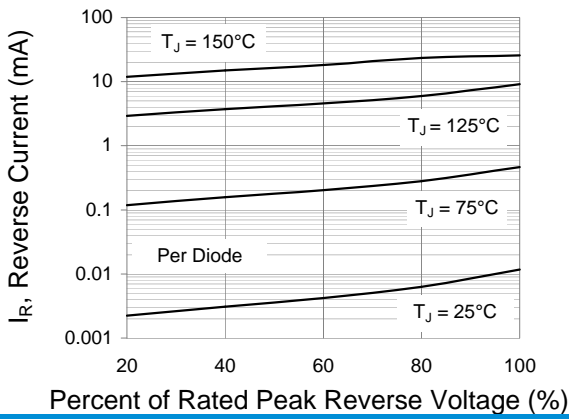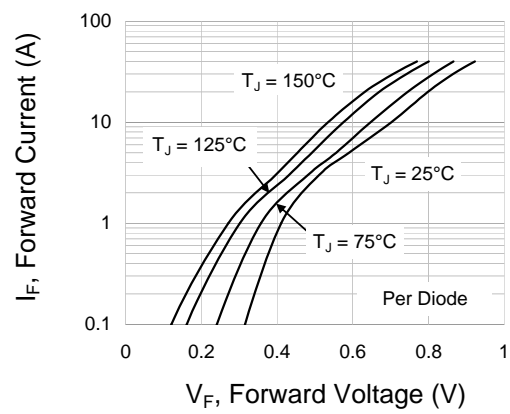**Fig.2 Typical Junction Capacitance**

Fig.3 Typical Reverse Characteristics

Fig.4 Typical Forward Characteristics