

MBR20150CL

LOW VF SCHOTTKY RECTIFIER

VOLTAGE 150 Volts **CURRENT** 20 Amperes

FEATURES

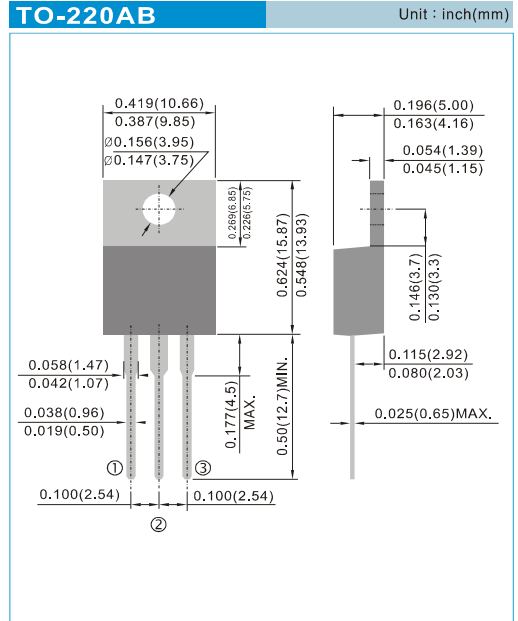
- Low forward voltage drop, low power losses
- High efficiency operation
- Lead free in comply with EU RoHS 2002/95/EC directives

MECHANICAL DATA

Case : ITO-220AB, Plastic

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

Weight : 0.055 ounces, 1.5615 grams.



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	150	V
Maximum rms voltage	V_{RMS}	105	V
Maximum dc blocking voltage	V_R	150	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	I_{FSM}	200	A
Typical thermal resistance	$R_{\theta JC}$	15	$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-55 to + 150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to + 150	$^\circ\text{C}$

Note : 1. Mounted on infinite heatsink.

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}	$I_R=1\text{mA}$	150	-	-	V
Instantaneous forward voltage per diode	V_F	$I_F=3\text{A}$ $T_J=25^\circ\text{C}$	-	0.61	-	V
		$I_F=5\text{A}$ $T_J=25^\circ\text{C}$	-	0.68	-	V
		$I_F=10\text{A}$ $T_J=25^\circ\text{C}$	-	0.76	0.81	V
Reverse current per diode	I_R	$V_R=120\text{V}$ $T_J=25^\circ\text{C}$	-	7	-	μA
		$V_R=150\text{V}$ $T_J=25^\circ\text{C}$	-	-	100	μA
		$V_R=150\text{V}$ $T_J=125^\circ\text{C}$	-	16	-	mA

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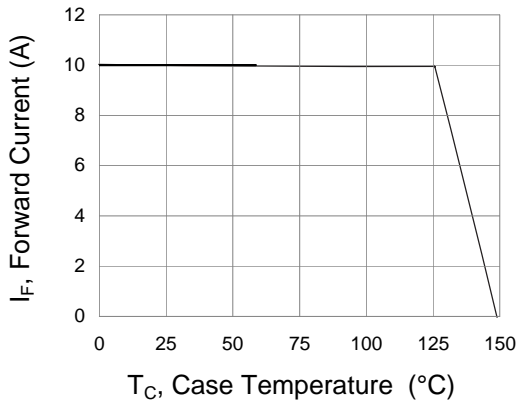


Fig.1 Forward Current Derating Curve

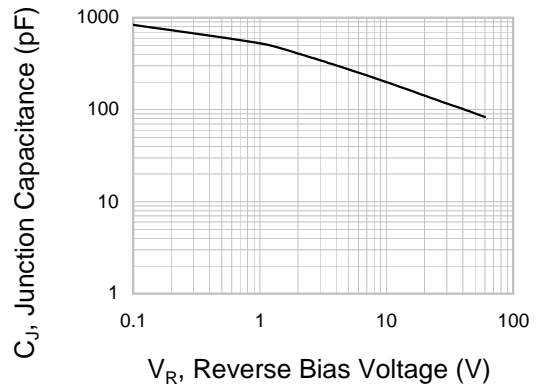


Fig.2 Typical Junction Capacitance

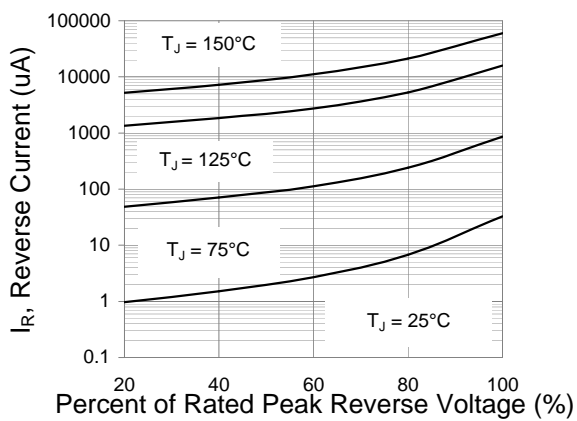


Fig.3 Typical Reverse Characteristics

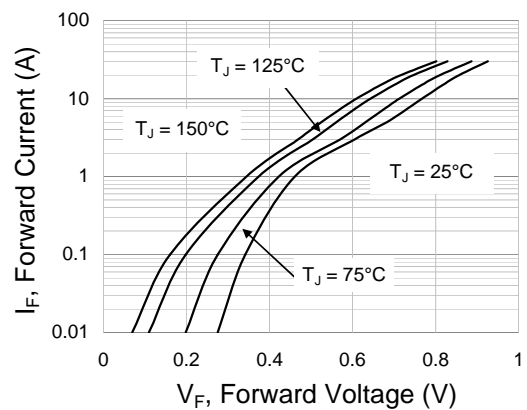


Fig.4 Typical Forward Characteristics