

MBR3060CL

LOW VF SCHOTTKY RECTIFIER

VOLTAGE 60 Volt **CURRENT** 30 Ampere

FEATURES

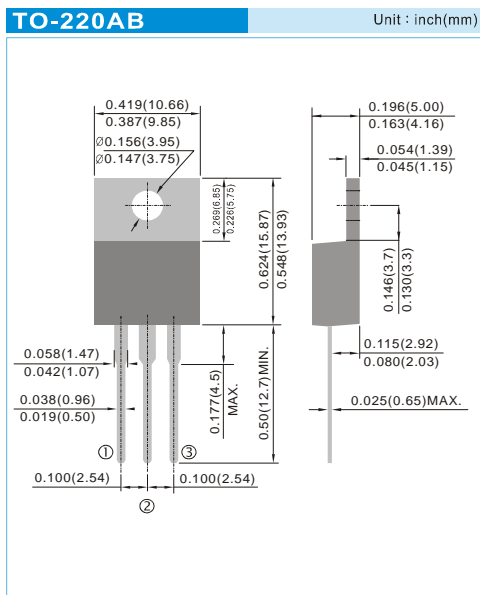
- Extreme low forward voltage drop, low power loss
- High efficiency operation
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

Case : TO-220AB, Plastic

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

Weight: 0.067 ounces, 1.89 grams.



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	60	V
Maximum average forward rectified current	$I_{F(AV)}$	15 30	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	250	A
Typical thermal resistance per diode	$R_{\theta JC}$	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	$^{\circ}\text{C}$

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}	$I_R=1\text{mA}$	60	-	-	V
Instantaneous forward voltage per diode	V_F	$I_F=3\text{A}$	-	0.33	-	V
		$I_F=7.5\text{A}$	-	0.41	-	V
		$I_F=15\text{A}$	-	0.51	0.56	V
Instantaneous forward voltage per diode	V_F	$I_F=3\text{A}$	-	0.25	-	V
		$I_F=7.5\text{A}$	-	0.37	-	V
		$I_F=15\text{A}$	-	0.51	-	V
Reverse current per diode	I_R	$V_R=48\text{V}$	-	100	-	μA
		$V_R=60\text{V}$	$T_J=25^{\circ}\text{C}$	-	0.15	0.5
		$T_J=125^{\circ}\text{C}$	-	26	-	mA



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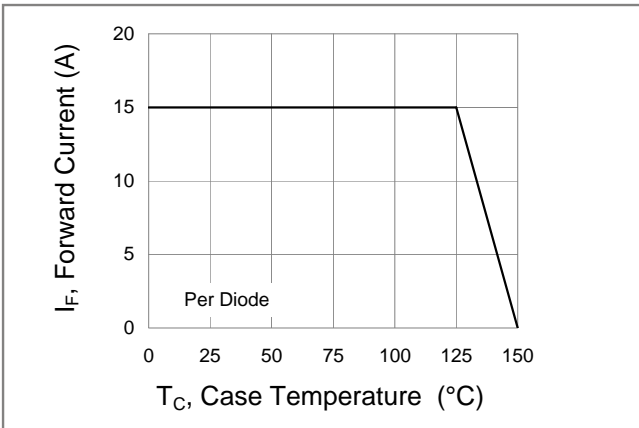


Fig.1 Forward Current Derating Curve

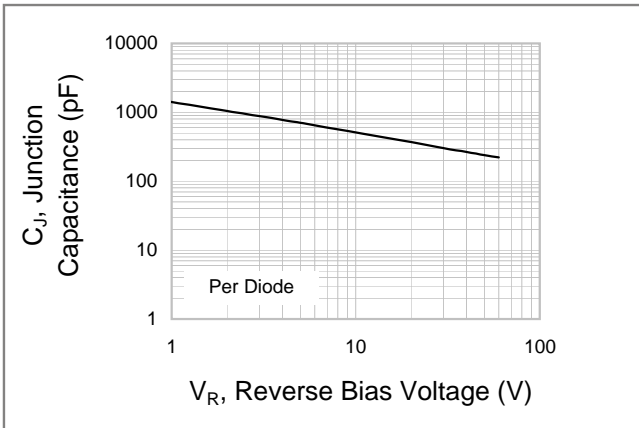


Fig.2 Typical Junction Capacitance

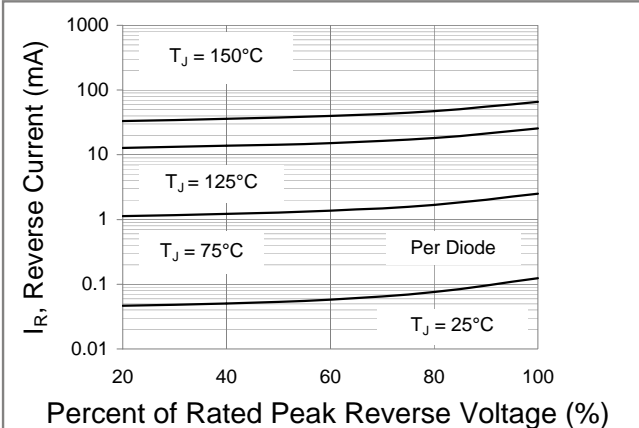


Fig.3 Typical Reverse Characteristics

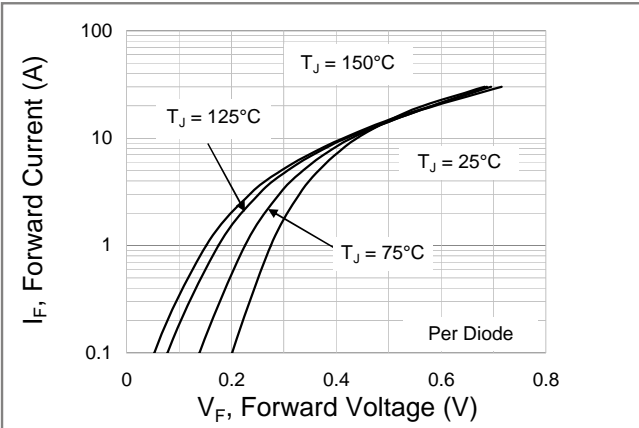


Fig.4 Typical Forward Characteristics