



■ ABSOLUTE MAXIMUM RATING ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

Ratings at  $25^{\circ}\text{C}$  ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOL	RATINGS	UNIT
Working Peak Reverse Voltage	$V_{RWM}$	120	V
Repetitive Peak Reverse Voltage	$V_{RRM}$	120	V
Maximum RMS Reverse Voltage	$V_{RMS}$	70	V
DC Blocking Voltage	$V_R$	120	V
Average Rectified Output Current ( $T_A=105^{\circ}\text{C}$ )	$I_O$	10	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	110	A
Junction Temperature	$T_J$	-55~+150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55~+150	$^{\circ}\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	TO-220/TO-220F	62.5	$^{\circ}\text{C}/\text{W}$
	TO-277	73 (Note)	$^{\circ}\text{C}/\text{W}$
Junction to Case	TO-220	2	$^{\circ}\text{C}/\text{W}$
	TO-220F	3.31	$^{\circ}\text{C}/\text{W}$
	TO-277	13 (Note)	$^{\circ}\text{C}/\text{W}$

Note: Mounted on an FR4 PCB, single-sided copper, with  $100\text{ cm}^2$  copper pad area.

■ ELECTRICAL CHARACTERISTICS (Note 2)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage Drop	$V_F$	$I_F=10\text{A}$ , $T_C=25^{\circ}\text{C}$			0.85	V
		$I_F=10\text{A}$ , $T_C=125^{\circ}\text{C}$			0.80	
Instantaneous Reverse Current	$I_R$	Rated DC Voltage, $T_C=25^{\circ}\text{C}$			500	$\mu\text{A}$
		Rated DC Voltage, $T_C=125^{\circ}\text{C}$			20	mA

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC

2. Pulse Test: Pulse Width =  $300\mu\text{s}$ , Duty Cycle  $\leq 2.0\%$

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