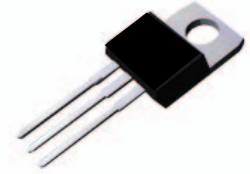


## Features

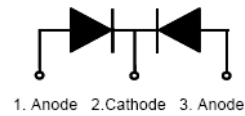
- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Low forward voltage, high efficiency
- Guarding for over voltage protection



Package: TO-220-AB

## Mechanical Data

- Case: epoxy, molded
- Weight: 1.9grams (approximately)
- Lead temperature for soldering purpose: 260°C max. for 10 sec
- 50 units per plastic tube



Schematic Diagram

## Maximum Ratings & Electrical Characteristics

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

Parameter	Test Conditions	Symbol	Value	Unit	
Maximum Repetitive Peak Reverse Voltage		$V_{RRM}$	200	V	
Working Peak Reverse Voltage		$V_{RWM}$	200	V	
Maximum DC Blocking Voltage		$V_{DC}$	200	V	
Maximum Average Forward Rectified Current @ $T_c=105^{\circ}\text{C}$	Total Device Per Diode	$I_{F(AV)}$	30 15	A	
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load per Diode		$I_{FSM}$	180	A	
Peak repetitive Reverse Current Per Leg at $t_p=2.0\mu\text{s}$ , 1KHz		$I_{RRM}$	1.0	A	
Voltage Rate of Change (rated $V_R$ )		$DV/dt$	10000	V/ $\mu\text{s}$	
Operating Junction Temperature Range		$T_J$	- 55 to+150	$^{\circ}\text{C}$	
Storage Temperature Range		$T_{STG}$	- 55 to+150	$^{\circ}\text{C}$	
Maximum Instantaneous Forward Voltage per Leg	$I_F=15\text{A}$	$V_F$	$T_c=25^{\circ}\text{C}$	1.2	V
	$I_F=15\text{A}$		$T_c=125^{\circ}\text{C}$	0.91	
Maximum Reverse Current per Leg at Working Peak Reverse Voltage		$I_R$	$T_J=25^{\circ}\text{C}$	200	$\mu\text{A}$
			$T_J=100^{\circ}\text{C}$	20	mA
<b>Thermal Characteristics (<math>T_A=25^{\circ}\text{C}</math> unless otherwise noted)</b>					
<b>Symbol</b>	<b>Parameter</b>	<b>Typ.(TO-220-AB)</b>		<b>Unit</b>	
$R_{\theta JC}$	Thermal Resistance, Junction to Case per Leg	2.0		$^{\circ}\text{C}/\text{W}$	
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient per Leg	62.5		$^{\circ}\text{C}/\text{W}$	

**Note:** Pulse test:300us pulse width, duty cycle=2%

## Ratings and Characteristics Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

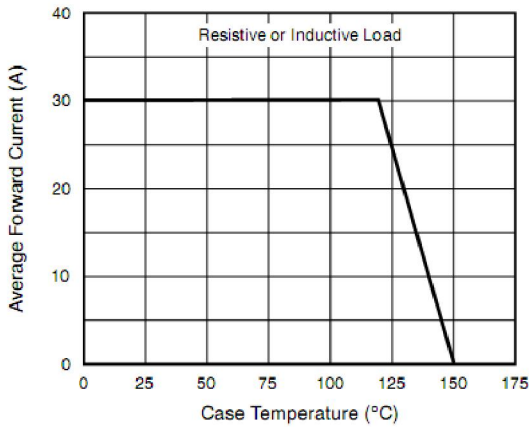


Figure 1. Forward Derating Curve

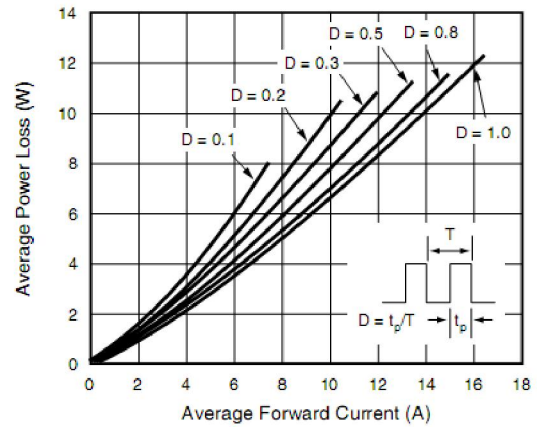


Figure 2. Forward Power Loss Characteristics Per Diode

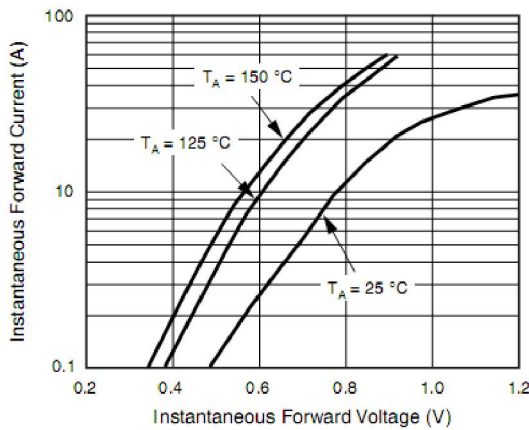


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

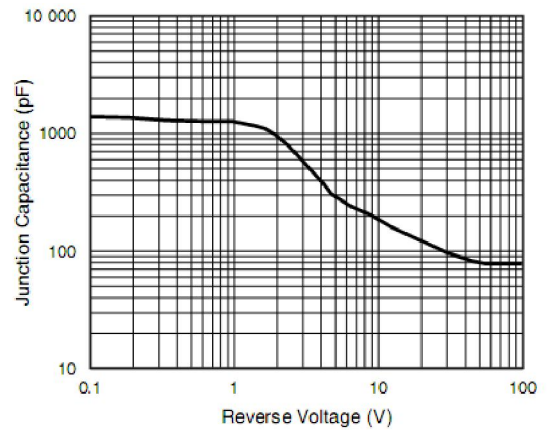


Figure 5. Typical Junction Capacitance Per Diode

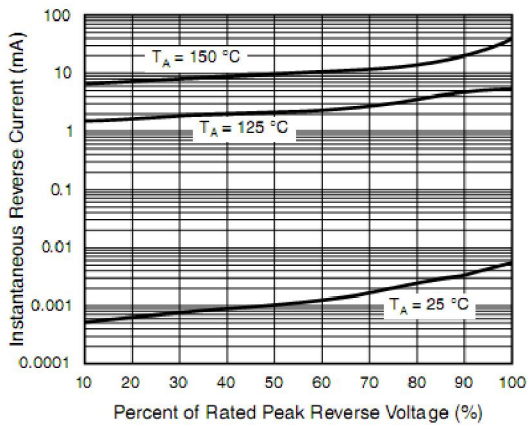


Figure 4. Typical Reverse Characteristics Per Diode

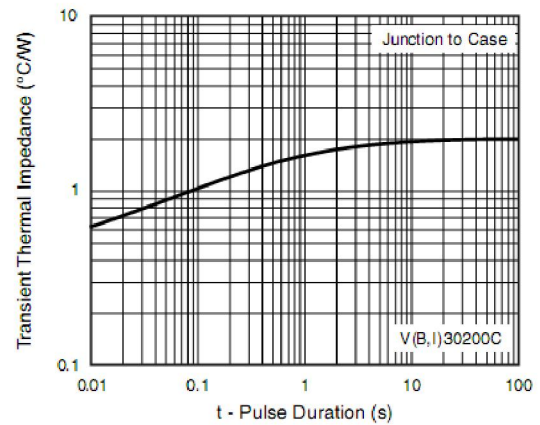


Figure 6. Typical Transient Thermal Impedance Per Diode

## Package Outline Dimensions

in millimeters

TO-220-AB

