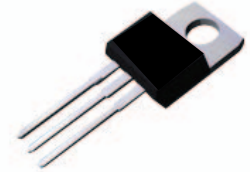


## Features

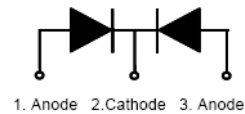
- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Low forward voltage, high efficiency
- Guarding for over voltage protection



Package: TO-220-AB

## Mechanical Data

- Case: epoxy, molded
- Weight: 1.9grams (approximately)
- Finish: all external surfaces corrosion resistant and terminal leads readily solderable
- Lead temperature for soldering purpose: 260°C max. for 10 sec
- 50 units per plastic tube



Schematic Diagram

## Maximum Ratings & Electrical Characteristics

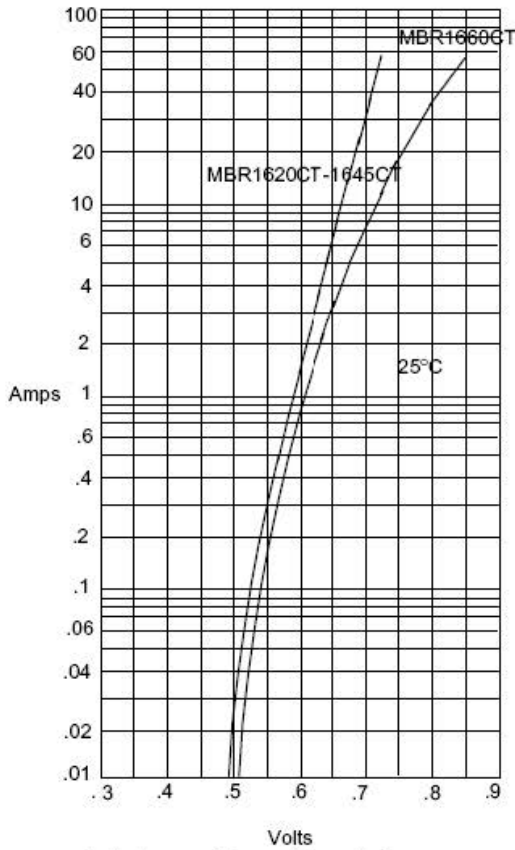
(T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Test Conditions	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	45	V
Working Peak Reverse Voltage		V <sub>RWM</sub>	45	V
Maximum DC Blocking Voltage		V <sub>DC</sub>	45	V
Maximum Average Forward Rectified Current @ T <sub>c</sub> =105°C	Total Device Per Diode	I <sub>F(AV)</sub>	15 7.5	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load per Diode		I <sub>FSM</sub>	120	A
Peak repetitive Reverse Current Per Leg at tp=2.0μs ,1KHz		I <sub>RRM</sub>	1.0	A
Voltage Rate of Change (rated V <sub>R</sub> )		DV/dt	10000	V/μs
Operating Junction Temperature Range		T <sub>J</sub>	- 55 to+150	°C
Storage Temperature Range		T <sub>STG</sub>	- 55 to+150	°C
Maximum Instantaneous Forward Voltage per Leg	I <sub>F</sub> =7.5A	T <sub>C</sub> =25°C	0.70	V
	I <sub>F</sub> =7.5A	T <sub>C</sub> =125°C	0.57	
Maximum Reverse Current per Leg at Working Peak Reverse Voltage		T <sub>J</sub> =25°C	100	μA
		T <sub>J</sub> =100°C	15	mA
<b>Thermal Characteristics (T<sub>A</sub>=25°C unless otherwise noted)</b>				
<b>Symbol</b>	<b>Parameter</b>	<b>Typ.(TO-220-AB)</b>		<b>Unit</b>
R <sub>θJC</sub>	Thermal Resistance, Junction to Case per Leg	2.0		°C/W
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient per Leg	62.5		°C/W

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

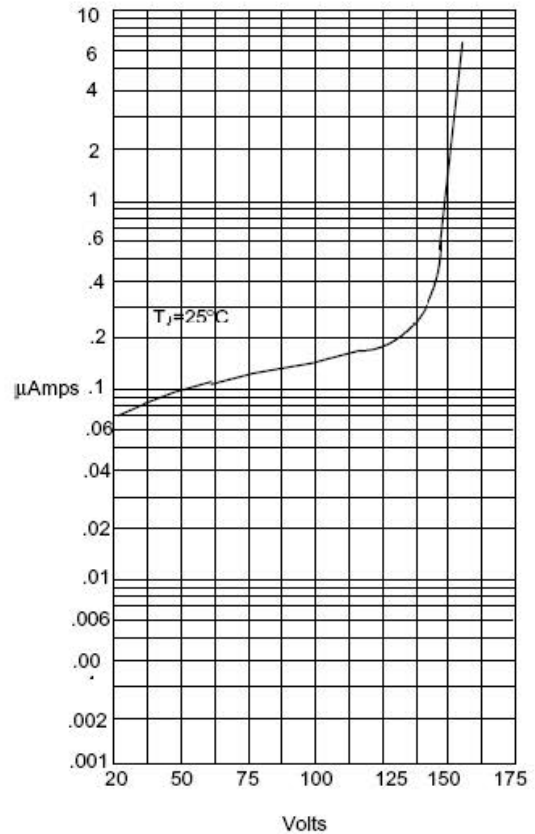
## Ratings and Characteristics Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Figure 1  
Typical Forward Characteristics



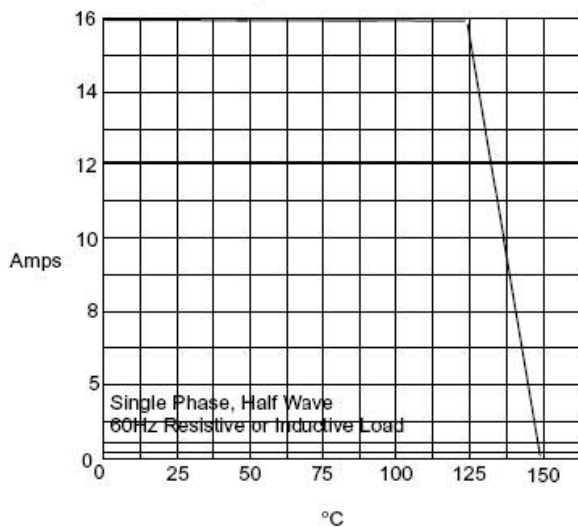
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



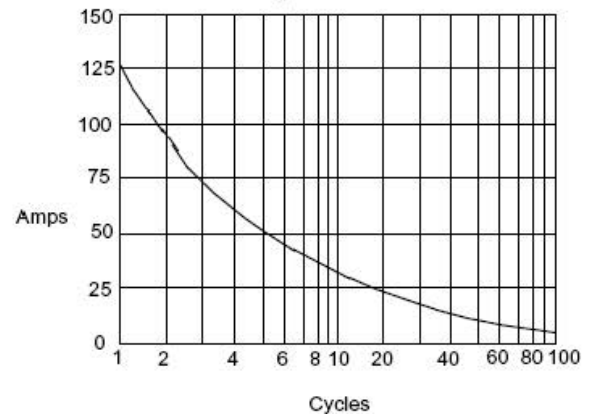
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 4  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles

## Package Outline Dimensions

in millimeters

TO-220-AB

