

Features

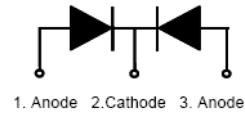
- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Low forward voltage, high efficiency
- Guarding for over voltage protection



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

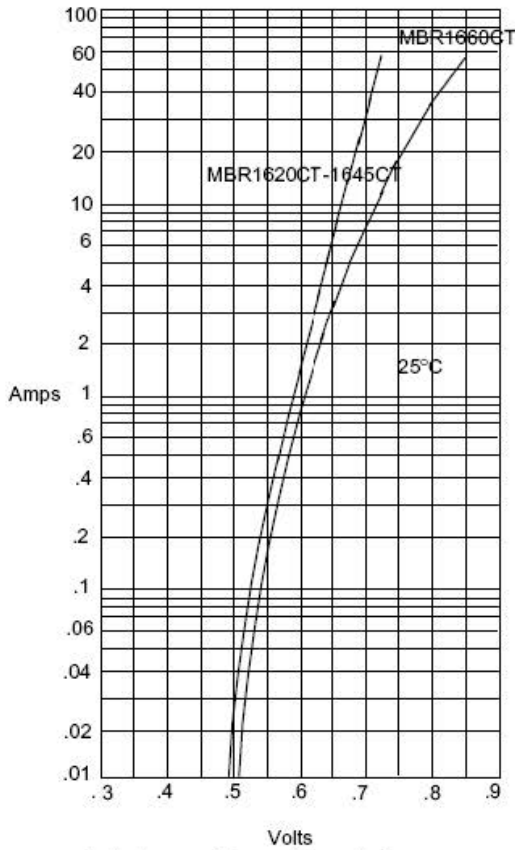
(T_A=25°C unless otherwise noted)

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

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

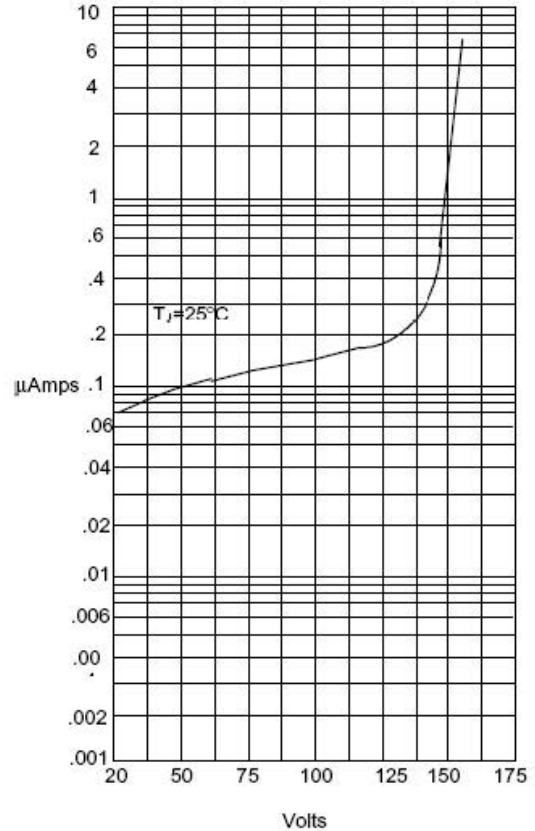
Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Figure 1
 Typical Forward Characteristics



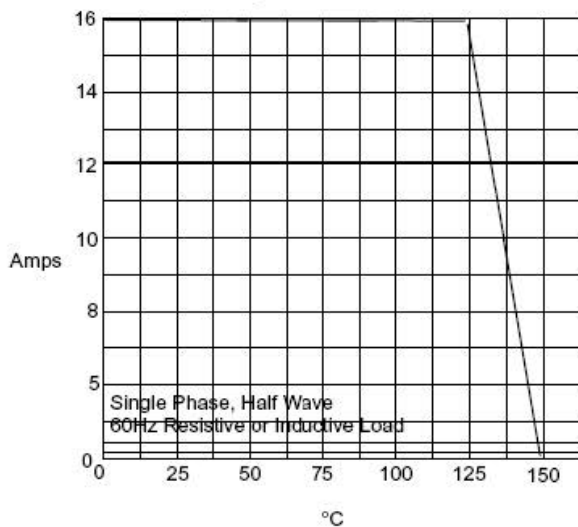
Instantaneous Forward Current - Amperes versus
 Instantaneous Forward Voltage - Volts

Figure 2
 Typical Reverse Characteristics



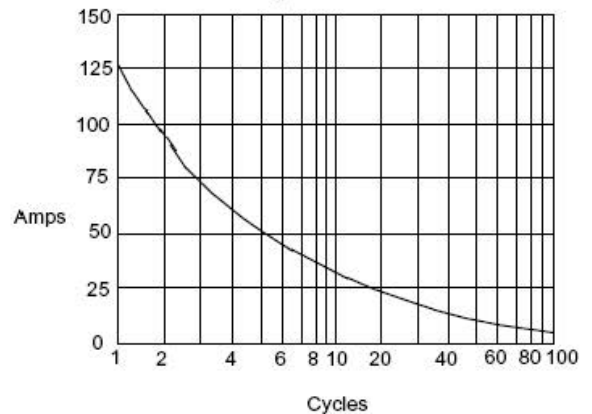
Instantaneous Reverse Leakage Current - MicroAmperes versus
 Percent Of Rated Peak Reverse Voltage - Volts

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

