

GSBR20150CT-GSBRF20150CT

Trench Schottky Barrier Rectifier
 Reverse Voltage 150 Volts Forward Current 20 Amperes

Features

- Low forward voltage drop, low power losses
- High efficiency operation
- Plastic package has underwriters Laboratory Flammability Classification 94V-0



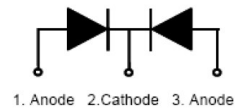
TO-220-AB
GSBR20150CT



ITO-220-AB
GSBRF20150CT

Mechanical Data

- Case: Epoxy, Molded
- Weight: 1.9grams Approximately
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 sec
- Shipped 50 units per plastic tube or tape reel packing 800/reel(TO-263)



Schematic Diagram

Maximum Ratings & Electrical Characteristics

(T_A=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	150	V
Working Peak Reverse Voltage		V _{RWM}	150	V
Maximum DC Blocking Voltage		V _{DC}	150	V
Maximum Average Forward Rectified Current at T _c =105°C	Total Device Per Diode	I _{F(AV)}	20 10	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load Per Diode		I _{FSM}	150	A
Peak Repetitive Reverse Current per Leg at t _p =2.0us , 1KHz		I _{RRM}	1.0	A
Voltage Rate of Change (rated V _R)		DV/dt	10000	V/us
Operating Junction Temperature Range		T _J	-55 to +150	°C
Storage Temperature Range		T _{STG}	-55 to +150	°C
Isolation Voltage (ITO-220-AB only) From Terminal to Heatsink t = 1 sec		V _{AC}	1500	V
Maximum Instantaneous Forward Voltage per Leg	I _F =10A T _C =25°C I _F =10A T _C =125°C	V _F	0.81 (0.76 TYP) 0.74	V
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	T _J =25°C T _J =100°C	I _R	200 15	uA mA
Thermal Characteristics T_A=25°C unless otherwise noted				
Symbol	Parameter	TYP (TO-220-AB)	TYP (ITO-220-AB)	Unit
R _{θJC}	Thermal Resistance, Junction to Case per Leg	2.0	4.0	°C /W
R _{θJA}	Thermal Resistance, Junction to Ambient per Leg	62.5	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)

Fig. 1 - Forward Current Derating Curve

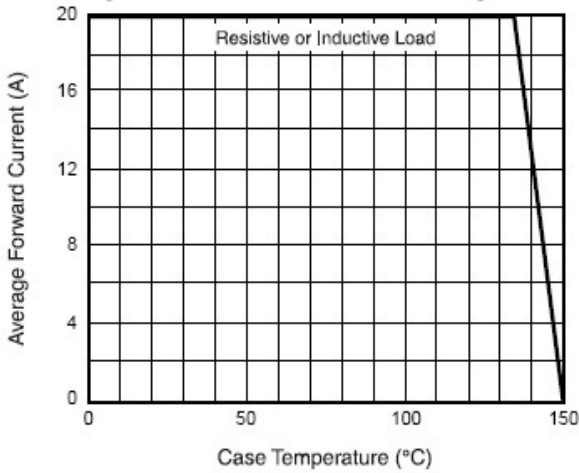


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

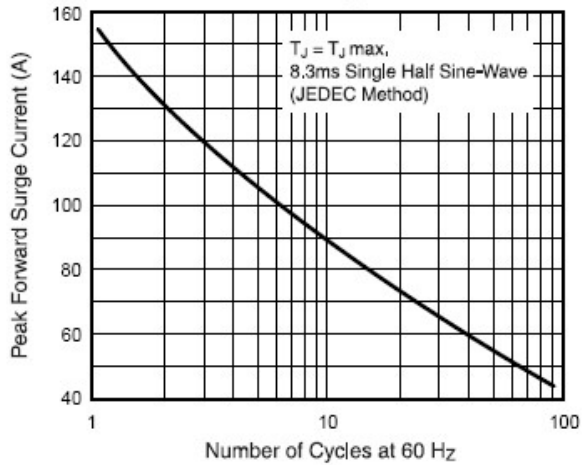


Fig. 3 - Typical Instantaneous Forward Characteristics

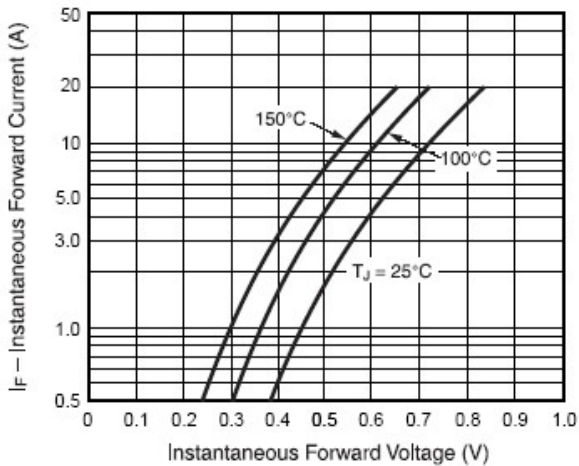


Fig. 4 - Typical Reverse Characteristics

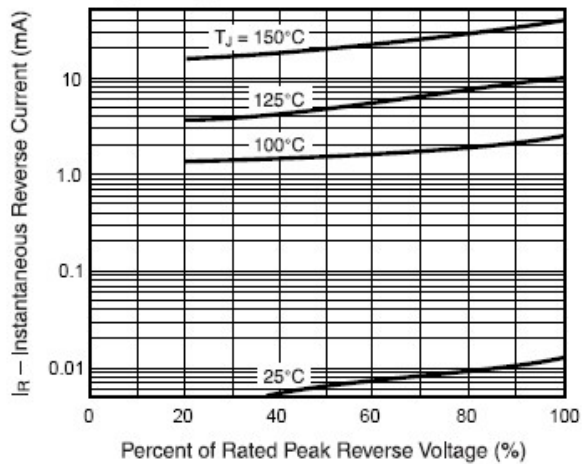
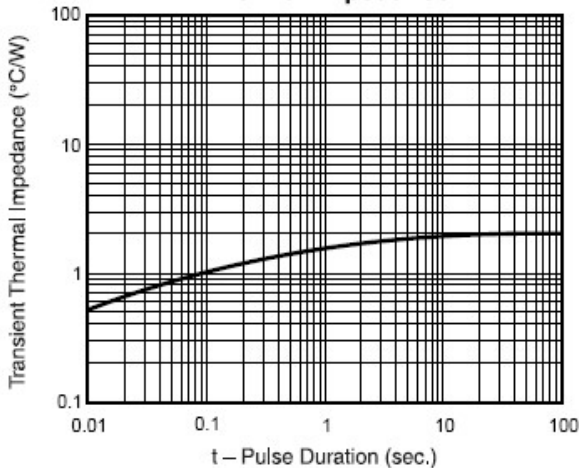
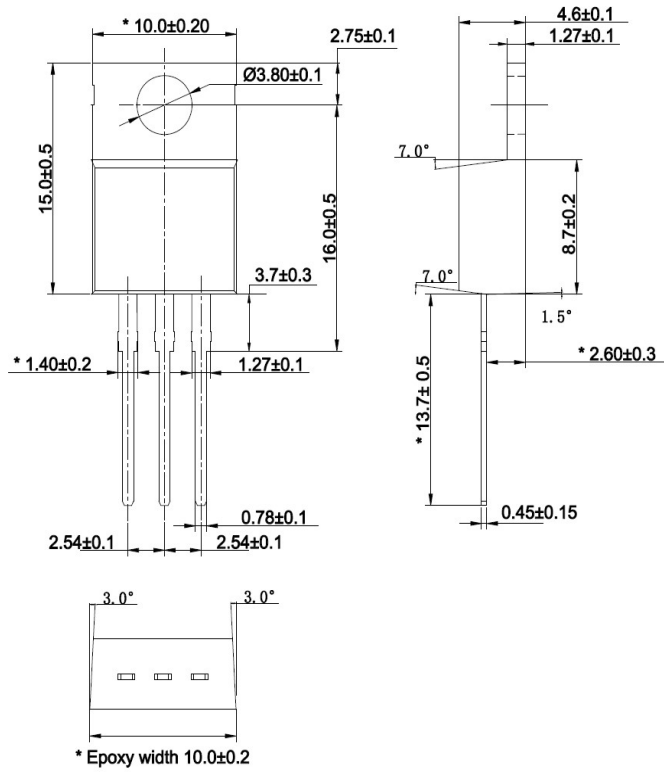


Fig. 5 - Typical Transient Thermal Impedance



Package Outline Dimensions Unit: millimeters

TO-220-AB



ITO-220-AB

