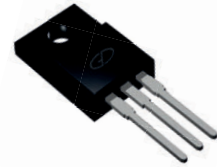
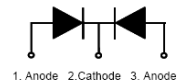


Features

- Plastic package has underwriters laboratory flammability classification 94V-0
- Fast switching for high efficiency
- Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling and polarity protection applications
- High temperature soldering guaranteed: 260°C/10 seconds, 0.25" (6.35mm) from case
- Component in accordance to RoHS 2011/65/EU



ITO-220AB



Schematic Diagram

Mechanical Data

- Case: JEDEC ITO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750, method 2026
- Polarity: As marked
- Mounting position: Any
- Weight: 0.08ounce, 2.24 gram

Maximum Ratings & Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified, single phase, half wave, resistive or inductive load. For capacitive load, derate by 20%.)

Parameters		Symbols	GSMURF 1620CT	GSMURF 1640CT	GSMURF 1660CT	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	200	400	600	V
Maximum RMS Voltage		V_{RMS}	140	280	420	V
Maximum DC Blocking Voltage		V_{DC}	200	400	600	V
Maximum Average Forward Rectified Current (see Fig.1)	Per leg	$I_{(AV)}$	8.0			A
	Total device		16.0			
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	150			A
Maximum Instantaneous Forward Voltage at 8.0A ¹		V_F	0.975	1.3	1.7	V
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage ¹	$T_A=25^\circ\text{C}$	I_R	5			μA
	$T_A=125^\circ\text{C}$		50			
Maximum Reverse Recovery Time ²		T_{rr}	35			nS
Typical Thermal Resistance ³		$R_{\theta JC}$	4.5			°C/W
Operating Junction Temperature Range		T_J	-55 to +175			°C
Storage Temperature Range		T_{STG}	-55 to +175			°C

Notes:

1. Pulse test: 300us pulse width, 1% duty cycle
2. Reverse recovery test conditions, $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$
3. Thermal resistance from junction to case

Ratings and Characteristics Curves

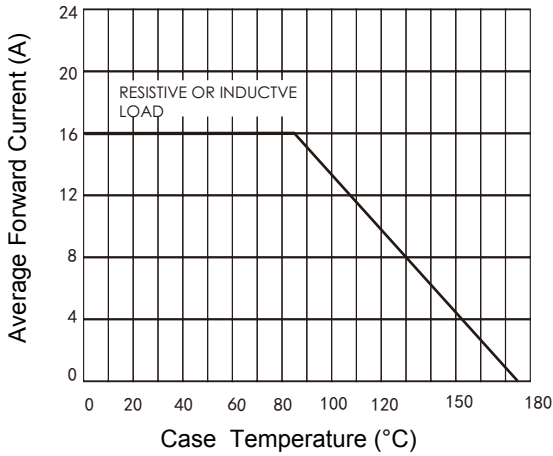


Figure 1. Forward Current Derating Curve

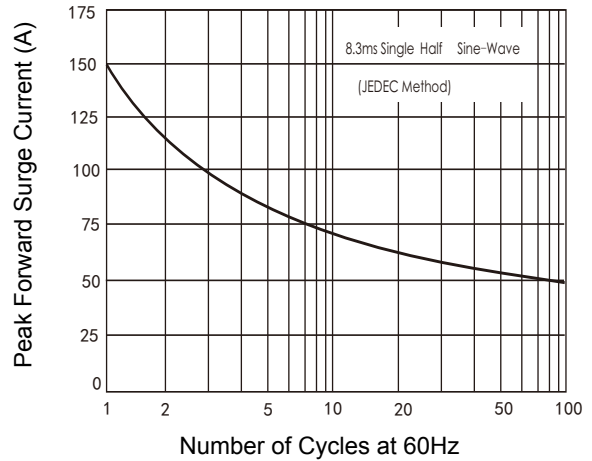


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

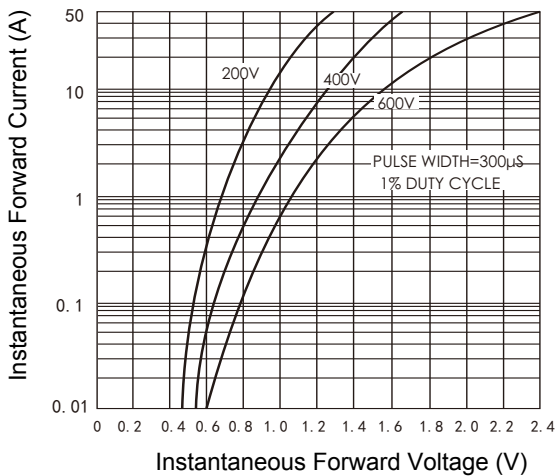


Figure 3. Typical Instantaneous Forward Characteristics

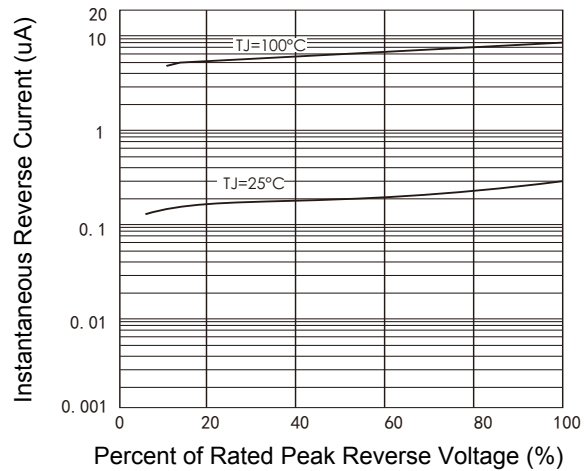


Figure 4. Typical Reverse Characteristics

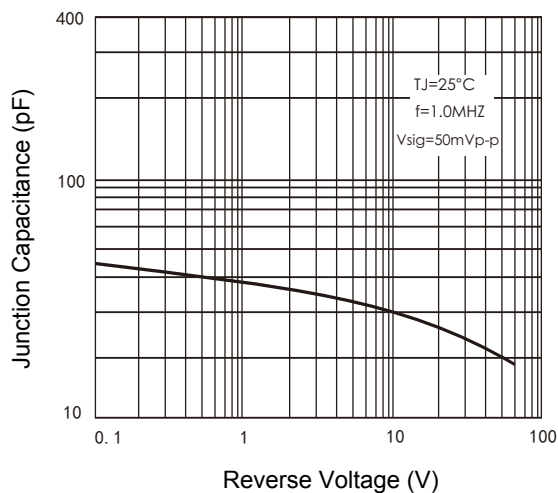


Figure 5. Typical Junction Capacitance

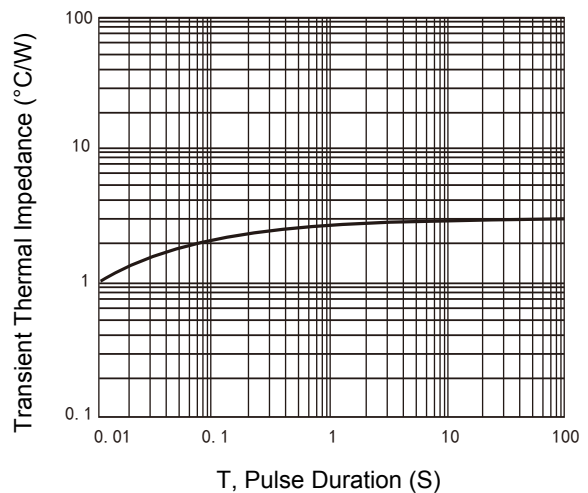


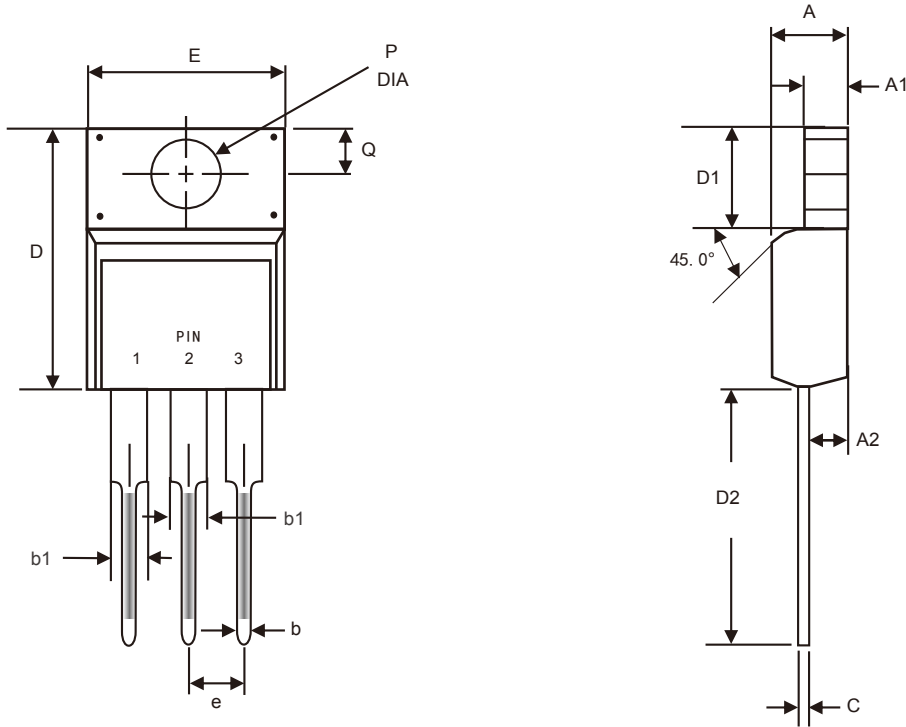
Figure 6. Typical Transient Thermal Impedance

GSMURF1620CT Thru GSMURF1660CT

Super Fast Recovery Rectifiers

Reverse Voltage 200V to 600V Forward Current 16A

Package Outline Dimensions (ITO-220AB)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.49	4.89	0.177	0.192
A1	2.28	2.88	0.090	0.113
A2	2.50	2.90	0.098	0.114
b	0.67	0.93	0.026	0.037
b1	1.10	1.43	0.043	0.056
C	0.37	0.63	0.015	0.025
D	15.40	16.40	0.606	0.646
D1	6.45	6.85	0.254	0.270
D2	12.50	13.50	0.492	0.531
e	2.44	2.64	0.096	0.104
E	9.91	10.41	0.390	0.410
Q	3.05	3.45	0.120	0.136
P	3.15	3.45	0.124	0.132