

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Repetitive peak reverse voltage: 1250-1300V
- Plastic material has UL classification 94V-0

Mechanical Data

- Plastic case: DO-204AL (DO-41)
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed: 250°C/10 seconds.375" (9.5mm) lead lengths at 5 lbs., (2.3kg) tension



DO-204AL (DO-41)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

Parameter	Symbols	GSBY127	GSBY133	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1250	1300	V
Maximum RMS Voltage	V_{RMS}	875	910	V
Maximum DC Blocking Voltage	V_{DC}	1250	1300	V
Max. Average Forward Rectified Current, R-load $T_A=75^\circ\text{C}^1$	$I_{F(AV)}$	1.0		A
Max. Average Forward Rectified Current, R-load $T_A=100^\circ\text{C}^1$		0.75		
Repetitive Peak Forward Current ($f>15\text{Hz}$) ¹	I_{FRM}	10		A
Peak Forward Surge Current, 50Hz Half Sine-Wave at $T_A=25^\circ\text{C}$	I_{FSM}	50.0		A
Rating for Fusing, $t<10\text{ms}$, $T_A=25^\circ\text{C}$	I^2t	12.5		A^2s
Maximum Forward Voltage at 1.0A, $T_J=25^\circ\text{C}$	V_F	1.1		V
Leakage Current @ $T_J=25^\circ\text{C}$, $V_R=V_{RRM}$	I_R	5		uA
Leakage Current @ $T_J=100^\circ\text{C}$, $V_R=V_{RRM}$		200		
Thermal Resistance Junction to Ambient Air ¹	$R_{\theta JA}$	45.0		$^\circ\text{C}/\text{W}$
Operating Junction Temperature	T_J	-50 to +150		$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-50 to +150		$^\circ\text{C}$

Note:

1. Valid provided leads are kept at ambient temperature at a distance of 10mm from case

GSBY127 thru GSBY133

High Voltage Glass Passivated Junction Rectifiers
 Reverse Voltage 1250V to 1300V Forward Current 1.0A

Ratings and Characteristic Curves

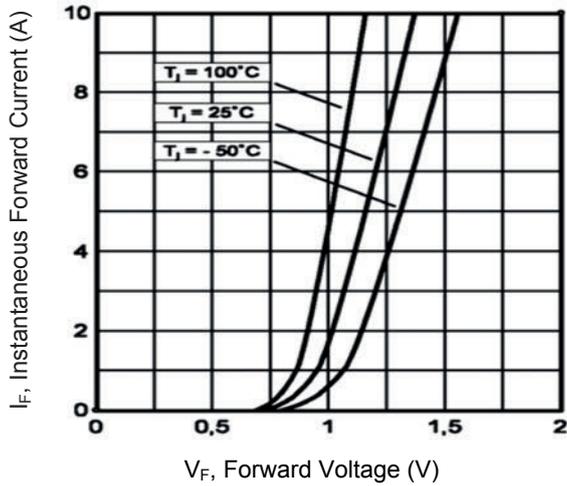


Figure 1. Forward Characteristics (Typical Values)

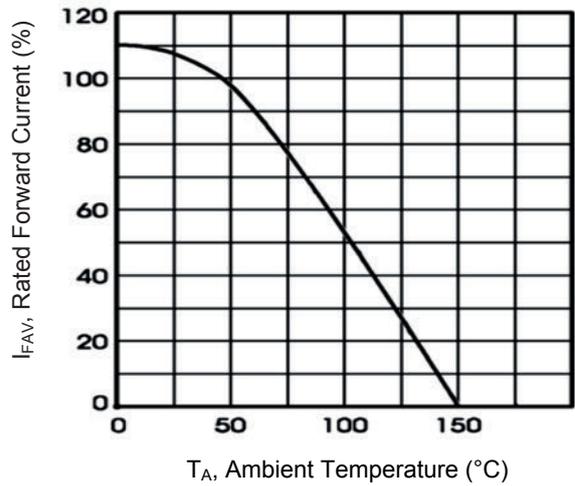


Figure 2. Rated Forward Current vs. Ambient Temperature

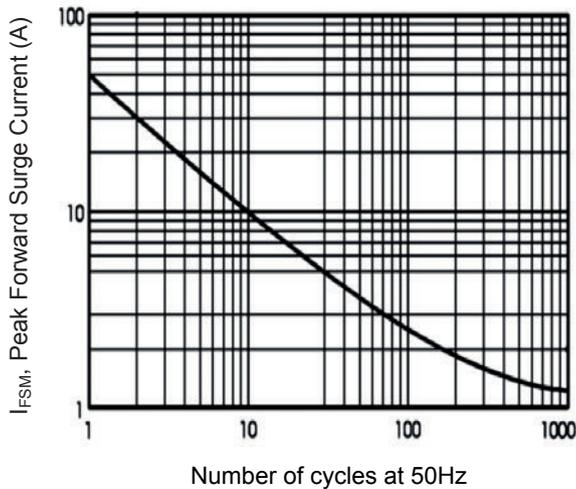


Figure 3. Peak Forward Surge Current

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Package Outline Dimensions DO-204AL (DO-41)

