

1N4001G THRU 1N4007G, BY133G

GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage – 50 to 1300 Volts

Forward Current – 1.0 Ampere

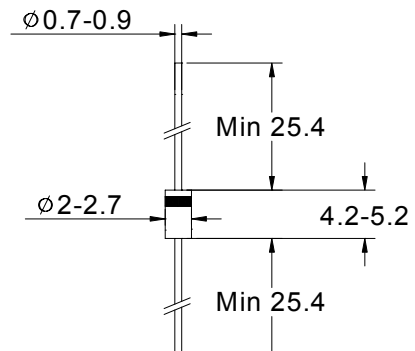
DO-41

Features

- Low forward voltage drop
- High Surge current capability

Mechanical Data

- **Case:** Molded plastic, DO-41
- **Lead:** Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any



Dimensions in mm

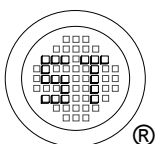
Absolute Maximum Ratings and Characteristics

Rating 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	Symbol	1N4001G	1N4002G	1N4003G	1N4004G	1N4005G	1N4006G	1N4007G	BY133G	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	1300	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	910	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	1300	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length at $T_A = 75^\circ\text{C}$	$I_{(AV)}$	1								A
Peak Forward Surge Current, 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method)	I_{FSM}	30								A
Maximum forward Voltage at 1A DC and 25 °C	V_F	1.1								V
Maximum Reverse Current $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A = 100^\circ\text{C}$	I_R	5 50								μA
Typical Junction Capacitance ¹⁾	C_J	15								pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	50								$^\circ\text{C/W}$
Typical Thermal Resistance ²⁾	$R_{\theta JL}$	25								$^\circ\text{C/W}$
Operating and Storage Temperature range	T_J, T_{stg}	-55 to +150								$^\circ\text{C}$

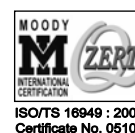
¹⁾ Measured at 1 MHz and applied reverse voltage of 4 volts.

²⁾ Thermal resistance from junction to ambient at 0.375"(9.5mm) lead length P.C.B. mounted.



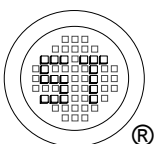
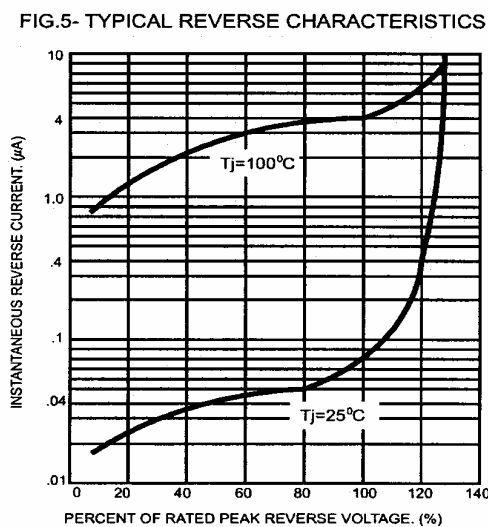
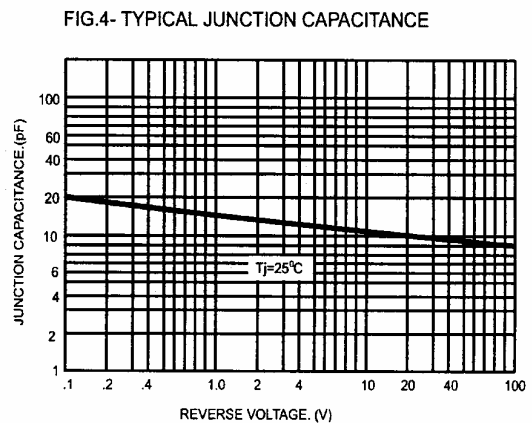
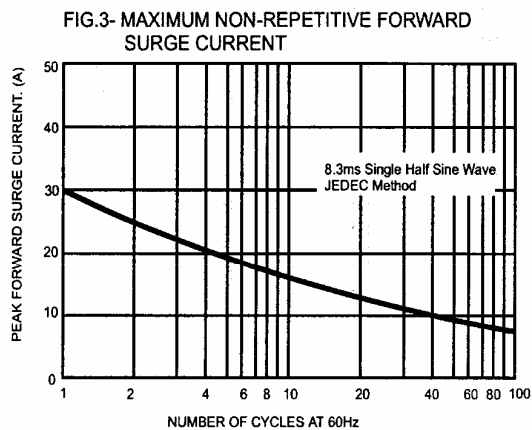
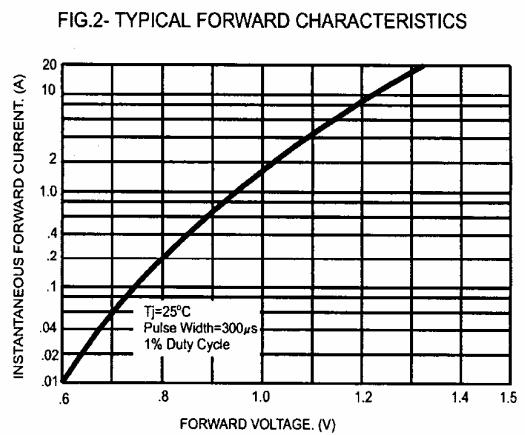
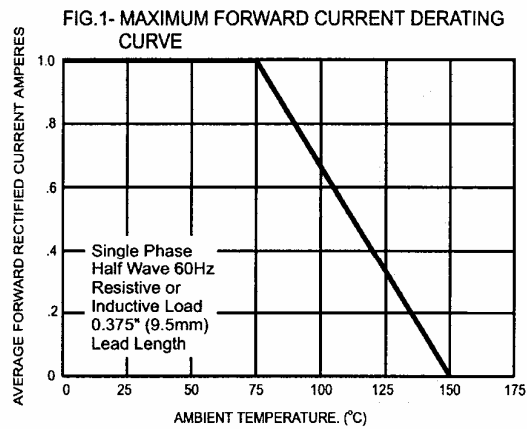
SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company
listed on the Hong Kong Stock Exchange, Stock Code: 724)



Dated : 07/12/2005 H

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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

Dated : 07/12/2005 H