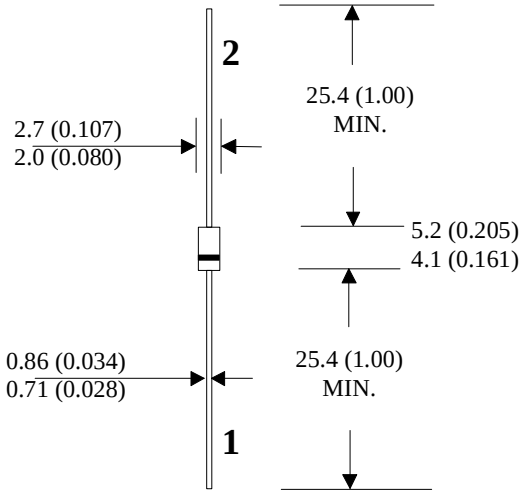
1N5802 – 1N5806
HIGH RELIABILITY TESTED

MECHANICAL DATA
Dimensions in mm (inches)



DO – 41 Package

Pin 1 = Cathode Pin 2 = Anode

GLASS PASSIVATED JUNCTION ULTRA FAST RECOVERY RECTIFIER DIODES

PRV : 50 - 150V
I_o : 2.5A

FEATURES:

- **High current capability**
- **High surge current capability**
- **High reliability**
- **Low reverse current**
- **Low forward volt drop**
- **Ultra fast recovery time**
- **RoHS Compliant**

MECHANICAL DATA:

- **Case: DO-41 Molded plastic**
- **Lead: Axial lead solderable per MIL-STD-202, Method 208 guaranteed.**
- **Mounting Position: Any**

ABSOLUTE MAXIMUM RATINGS

T_{amb}= 25℃ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

			1N5802	1N5803	1N5804	1N5805	1N5806
V_{RWM}	Maximum Working Peak Reverse Voltage		50V	75V	100V	125V	150V
$I_{F(AV)}$	Maximum Average Forward Current	T_{Lead} = 75℃	2.5A (1)				
		T_{amb} = 55℃	1.0A				
I_{FSM}	Maximum Forward Surge Current (2)		35A				
T_{stg}	Storage Temperature Range		-65 to +175 ℃				
T_J	Junction Temperature Range		-65 to +175 ℃				

Notes
(1) Measured at 3/8” lead length. Derate at 25mA/℃ above TLead=75℃
(2) Ta=25℃ @ $I_{F(AV)}$=1.0A and V_{RWM} for ten 8.3mS surges at 1minute intervals (JEDEC Method)

Semelab plc. Telephone +44(0)1455 556565. Fax +44(0)1455 552612.
E-mail: sales@semelab.co.uk Website: http://www.semelab.co.uk

1N5802 – 1N5806
HIGH RELIABILITY TESTED

ELECTRICAL CHARACTERISTICS (T_{amb}= 25℃ unless otherwise specified)

	Parameter	Test Conditions		Min.	Typ.	Max.	Unit
$V_{(BR)}$	Minimum Breakdown Voltage	I_R = 100 µA	1N5802	55			V
			1N5803	80			
			1N5804	110			
			1N5805	135			
			1N5806	160			
V_F	Maximum Forward Voltage	I_F = 1.0A				0.875	
I_R	Maximum Reverse Current	$V_R = V_{RWM}$				1.0	µA
			T_{amb} = 100℃			50.0	
t_{rr}	Maximum Reverse Recovery Time	I_F = 0.5A	I_R = 1.0A			25	nS
		I_{RR} = 0.25A					

Semelab plc. Telephone +44(0)1455 556565. Fax +44(0)1455 552612.
E-mail: sales@semelab.co.uk Website: http://www.semelab.co.uk