

1N5614 - 1N5622

GLASS PASSIVATED JUNCTION SILICON RECTIFIERS

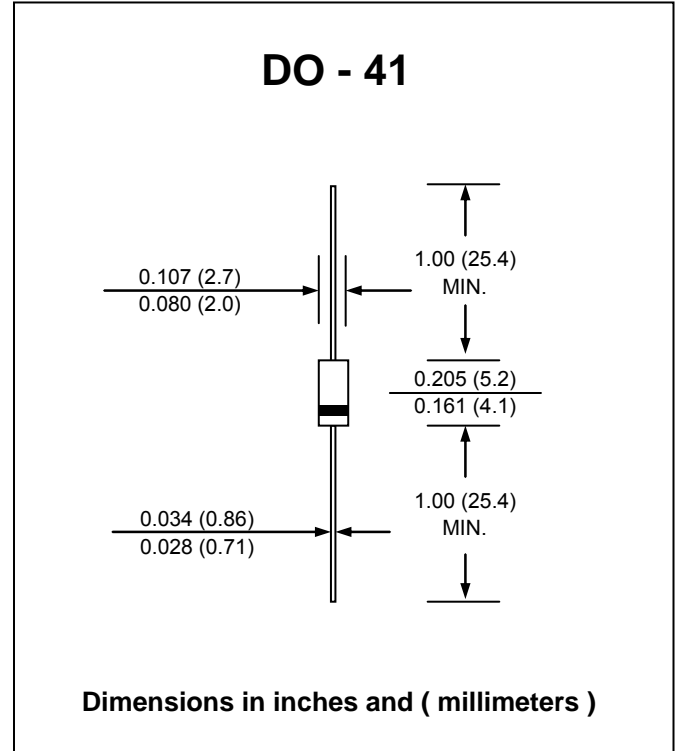
PRV : 200 - 1000 Volts
I_o : 1.0 Ampere

FEATURES :

- * Glass passivated chip
- * High forward surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : DO-41 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.34 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL	1N5614	1N5616	1N5618	1N5620	1N5622	UNIT
Maximum Working Peak Reverse Voltage	V _{RWM}	200	400	600	800	1000	V
Minimum Breakdown Voltage @ 50 μA	V _{BR(MIN)}	220	440	660	880	1100	V
Maximum Average Forward Current at Ta = 55 °C at Ta = 100 °C	I _{F(AV)}	1.0 0.75					A
Peak Forward Surge Current (Ta = 100 °C, f = 60 Hz, I _{F(AV)} = 750 mA for ten 8.3 ms surges @ 1 minute intervals)	I _{FSM}	30					A
Minimum Forward Voltage at I _F = 3.0 A	V _{F(MIN)}	0.8					V
Maximum Forward Voltage at I _F = 3.0A	V _{F(MAX)}	1.3					V
Maximum Reverse Current at V _{RWM} , Ta = 25 °C at V _{RWM} , Ta = 100 °C	I _R I _{R(H)}	0.5 25					μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	2.0					μs
Thermal Resistance , Junction to Lead (Note 2)	R _{θJL}	38					°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-65 to +175					°C

Notes :

- (1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_{RM} = 1.0 A, I_{R(REC)} = 0.25 A.
- (2) At 3/8"(10 mm) lead length form body.