

1N5614 - 1N5622

PRV : 200 - 1000 Volts
Io : 1.0 Ampere

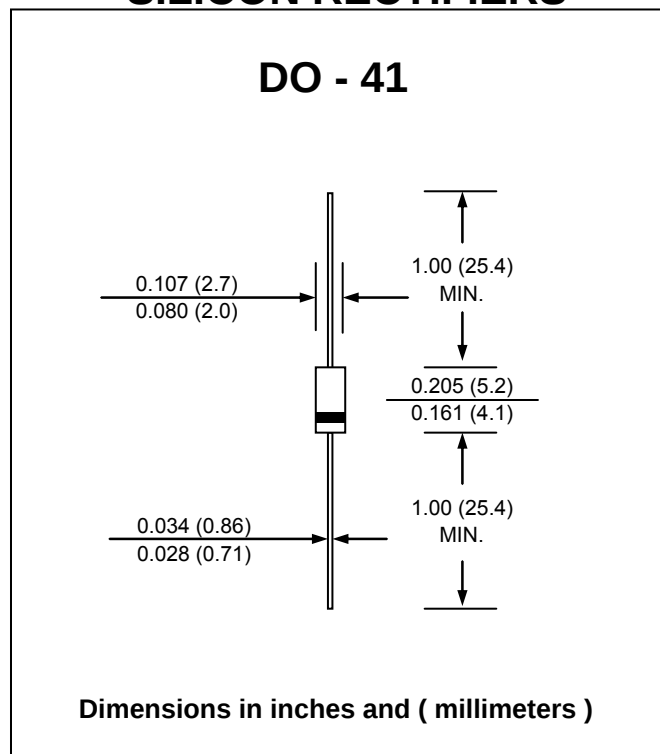
FEATURES :

- * 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

GLASS PASSIVATED JUNCTION SILICON RECTIFIERS



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 μ A	$V_{BR(MIN)}$	220	440	660	880	1100	V
Maximum Average Forward Current at $T_a = 55\text{ }^{\circ}\text{C}$ at $T_a = 100\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	1.0 0.75					A
Peak Forward Surge Current ($T_a = 100\text{ }^{\circ}\text{C}$, $f = 60\text{ Hz}$, $I_{F(AV)} = 750\text{ mA}$ for ten 8.3 ms surges @ 1 minute intervals)	I_{FSM}	30					A
Minimum Forward Voltage at $I_F = 3.0\text{ A}$	$V_{F(MIN)}$	0.8					V
Maximum Forward Voltage at $I_F = 3.0\text{ A}$	$V_{F(MAX)}$	1.3					V
Maximum Reverse Current at V_{RWM} , $T_a = 25\text{ }^{\circ}\text{C}$ at V_{RWM} , $T_a = 100\text{ }^{\circ}\text{C}$	I_R $I_{R(H)}$	0.5 25					μ A
Maximum Reverse Recovery Time (Note 1)	T_{rr}	2.0					μ s
Thermal Resistance , Junction to Lead (Note 2)	$R_{\theta JL}$	38					$^{\circ}\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +175					$^{\circ}\text{C}$

Notes :

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