

1N5624 - 1N5627

PRV : 200 - 800 Volts
Io : 3.0 Amperes

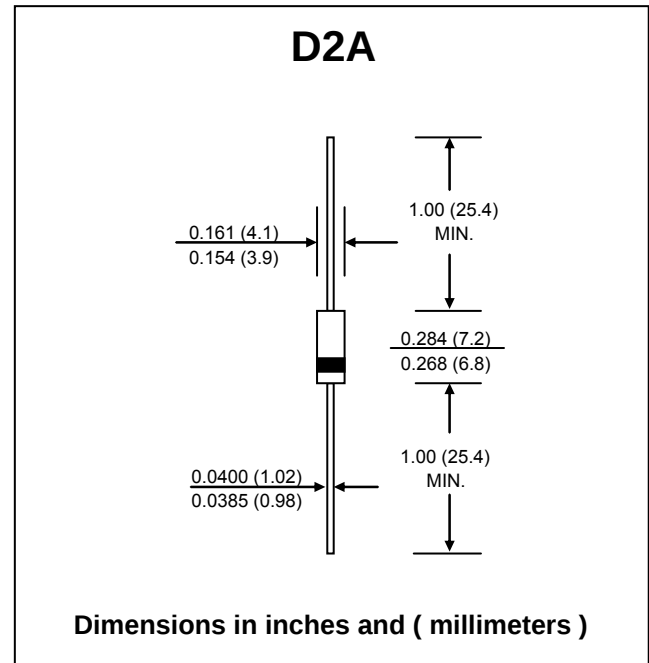
FEATURES :

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

MECHANICAL DATA :

- * Case : D2A 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 : 0.645 gram

GLASS PASSIVATED JUNCTION SILICON RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	1N5624	1N5625	1N5626	1N5627	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	800	V
Maximum RMS Voltage	V_{RMS}	140	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length $T_a = 70\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	3.0				A
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	125				A
Maximum Forward Voltage at $I_F = 3.0\text{ A}$, $T_a = 25\text{ }^{\circ}\text{C}$ at $I_F = 3.0\text{ A}$, $T_a = 175\text{ }^{\circ}\text{C}$	V_F	1.00 0.95				V
Maximum DC Reverse Current $T_a = 25\text{ }^{\circ}\text{C}$ at rated DC Blocking Voltage $T_a = 175\text{ }^{\circ}\text{C}$	I_R	5.0				μA
	$I_{R(H)}$	300		200		μA
Maximum Full Load Reverse Current, Full Cycle Average 0.375"(9.5mm) Lead Length at $T_a = 70\text{ }^{\circ}\text{C}$	$I_{R(AV)}$	150		100		μA
Typical Junction Capacitance (Note1)	C_J	40				pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	20				$^{\circ}\text{C/W}$
	$R_{\theta JL}$	10				$^{\circ}\text{C/W}$
Junction Temperature Range	T_J	- 65 to + 175				$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	- 65 to + 175				$^{\circ}\text{C}$

Notes :

- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (2) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, with both leads attached between heat sinks

RATING AND CHARACTERISTIC CURVES (1N5624 ~ 1N5627)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

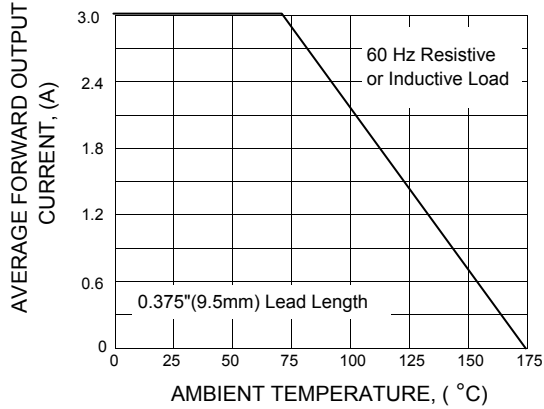


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

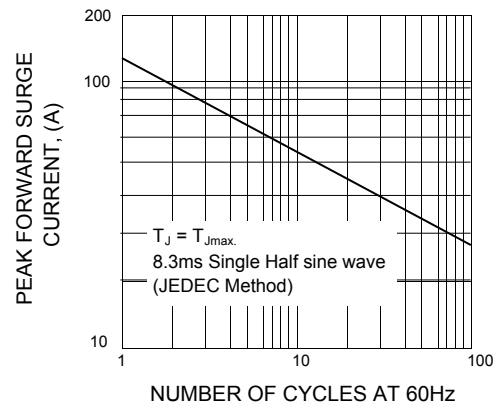


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

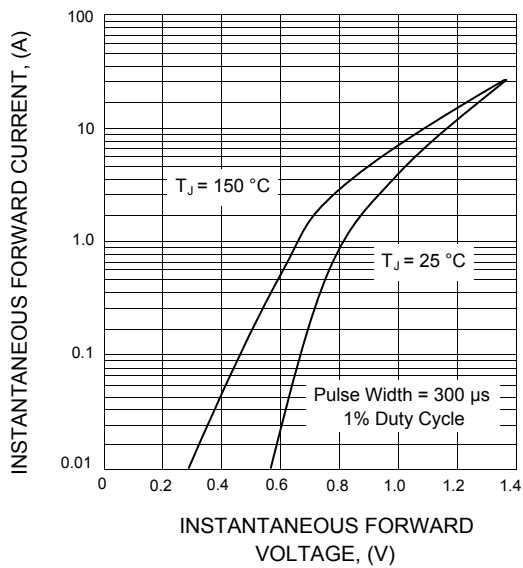


FIG 4 - TYPICAL JUNCTION CAPACITANCE

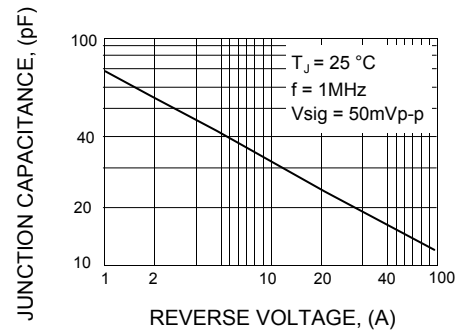


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

