

RL251 - RL257

PRV : 50 - 1000 Volts
I_o : 2.5 Amperes

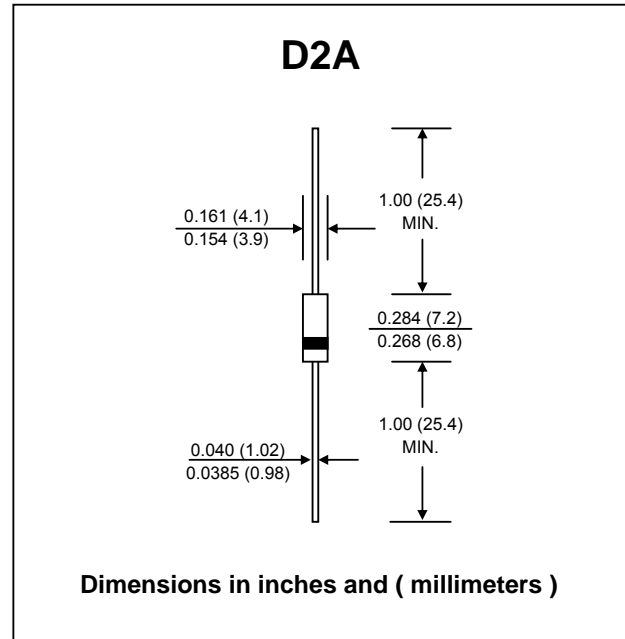
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **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

SILICON RECTIFIER DIODES



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	RL251	RL252	RL253	RL254	RL255	RL256	RL257	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current at Ta = 75 °C	I _{F(AV)}	2.5							A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	150							A
Maximum Forward Voltage at I _F = 2.5 A	V _F	1.1							V
Maximum DC Reverse Current Ta = 25 °C at rated DC Blocking Voltage Ta = 100 °C	I _R	5							µA
	I _{R(H)}	50							µA
Typical Junction Capacitance (Note 1)	C _J	35							pF
Typical Thermal Resistance	R _{θJA}	35							°C/W
Operation Junction and Storage Temperature Range	T _J , T _{STG}	- 65 to + 175							°C

Note :

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{bc}

RATING AND CHARACTERISTIC CURVES (RL251 - RL257)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

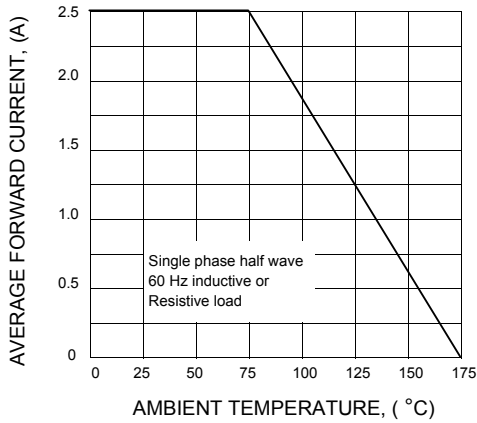


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

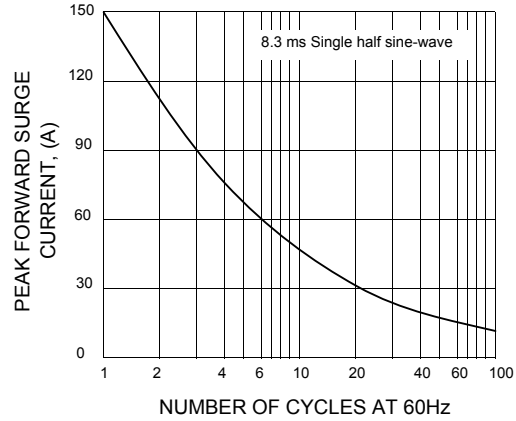


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

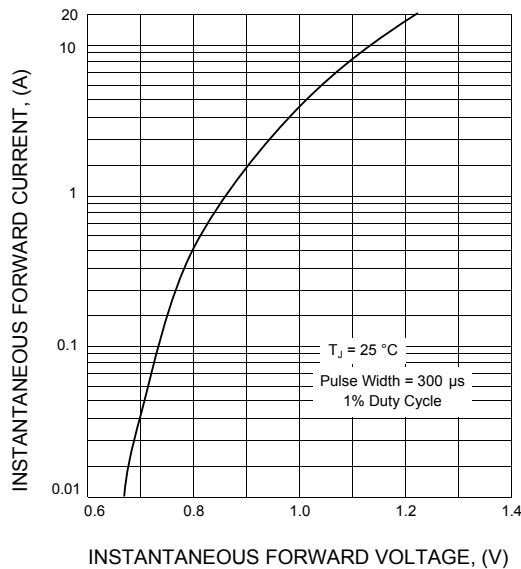


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

