



RGL41A-RGL41M

Surface Mount Rectifiers

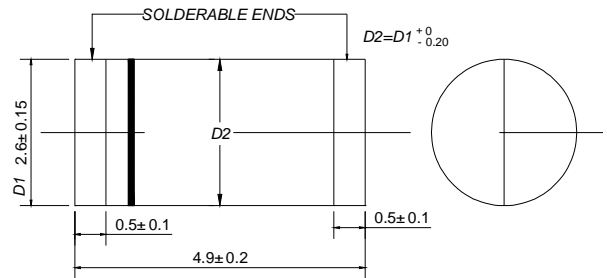
VOLTAGE RANGE: 50 --- 1000 V

CURRENT: 1.0 A

DO - 213AB

Features

- Plastic package has underwriters laboratories flammability classification 94V-0
- Glass passivated chip junction
- For surface mount applications
- High temperature metallurgically bonded construction
- Cavity-free glass passivated junction
- High temperature soldering guaranteed:450 /5 seconds at terminals.Complete device sub-mersible temperature of 265 for 10 seconds in solder bath



Mechanical Data

- Case: JEDEC DO-213AB,molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.0046 ounces, 0.116 grams
- Mounting position: Any

Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate current by 20%.

		RGL 41A	RGL 41B	RGL 41D	RGL 41G	RGL 41J	RGL 41K	RGL 41M	UNITS
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 rectified current $T_T=55$	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Maximum instantaneous forward voltage @1.0A	V_F	1.3							V
Maximum reverse current @ $T_A=25$ at rated DC blocking voltage @ $T_A=125$	I_R	5.0 50							μA
Maximum reverse recovery time (Note 1)	t_{rr}	150				250	500		ns
Typical junction capacitance (Note 2)	C_j	15							pF
Typical thermal resistance (Note 3)	$R_{\theta JA}$	75							/W
Operating junction temperature range	T_j	- 55 ---- +175							
Storage temperature range	T_{STG}	- 55 ---- +175							

NOTE: 1. Measured with $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient, 0.24x0.24"(6.0x6.0mm) copper pads to each terminal.

Ratings AND Characteristic Curves

FIG.1 – FORWARD CURRENT DERATING CURVE

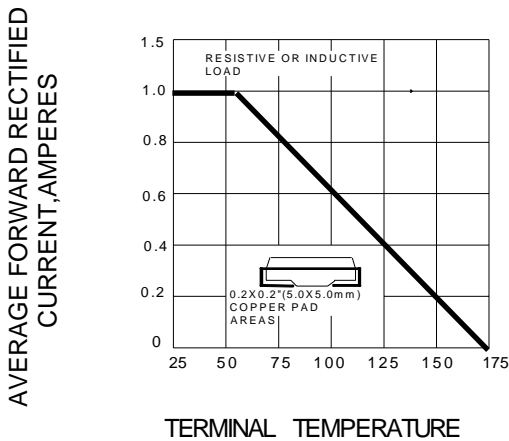
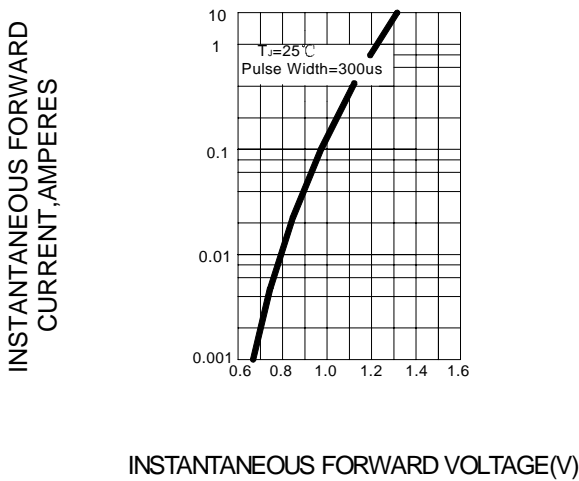
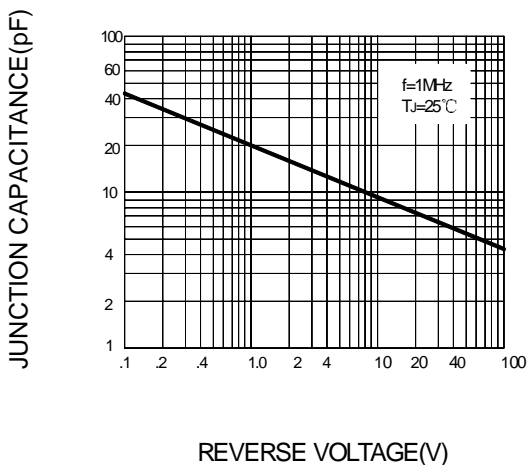


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE(V)

FIG.5 – TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE(V)

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

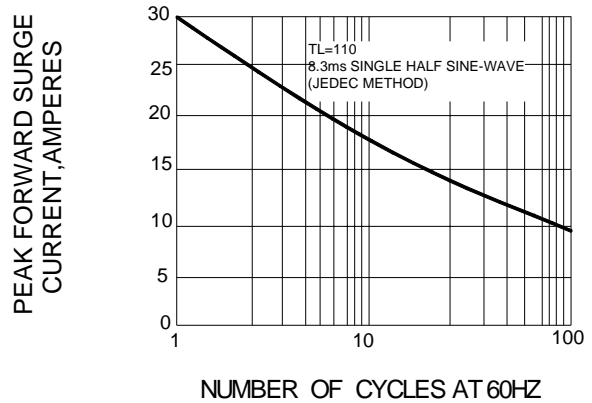
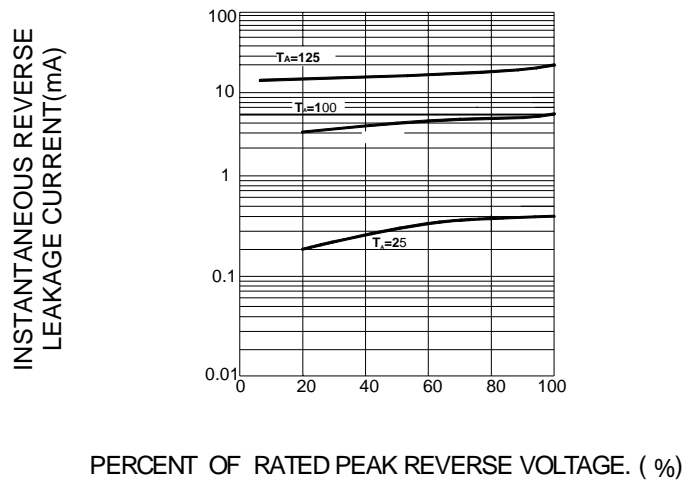


FIG.4 – TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE. (%)

FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE

