

2 AMP FAST RECOVERY SILICON DIODES

FEATURES

- PROPRIETARY **SOFT GLASS[®]** JUNCTION PASSIVATION FOR SUPERIOR RELIABILITY AND PERFORMANCE
- VOID FREE VACUUM DIE SOLDERING FOR MAXIMUM MECHANICAL STRENGTH AND HEAT DISSIPATION (Solder Voids: Typical $\leq 2\%$, Max. $\leq 10\%$ of Die Area)
- EXTREMELY LOW LEAKAGE AT HIGH TEMPERATURES
- LOW FORWARD VOLTAGE DROP
- 2A at $T_A = 75^\circ\text{C}$ WITH NO THERMAL RUNAWAY

MECHANICAL DATA

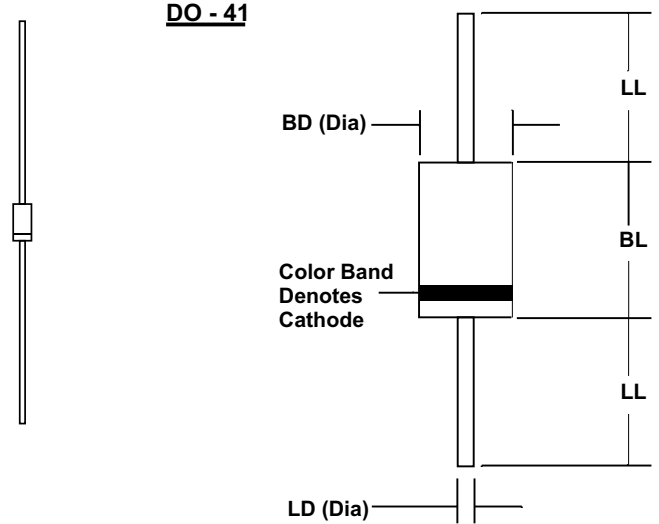
- Case: JEDEC DO-41 molded epoxy (U/L Flammability Rating 94V-0)
- Terminals: Plated axial leads
- Soldering: Per MIL-STD 202 Method 208 guaranteed
- Polarity: Color band denotes cathode
- Mounting Position: Any
- Weight: 0.01 Ounces (0.4 Grams)

RoHS COMPLIANT

MECHANICAL SPECIFICATION

ACTUAL SIZE OF DO-41 PACKAGE

SERIES RGP200 - RGP210



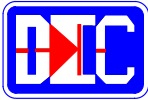
Sym	Minimum		Maximum	
	In	mm	In	mm
BL	0.160	4.1	0.205	5.2
BD	0.103	2.6	0.107	2.7
LL	1.00	25.4		
LD	0.028	0.71	0.034	0.86

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

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

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS								UNITS
		RGP 200	RGP 201	RGP 202	RGP 204	RGP 206	RGP 208	RGP 210		
Series Number										
Maximum DC Blocking Voltage	V_{RM}	50	100	200	400	600	800	1000		VOLTS
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700		
Maximum Peak Recurrent Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000		
Average Forward Rectified Current @ $T_A = 75^\circ\text{C}$, Lead length = 0.375 in. (9.5 mm)	I_o	2								AMPS
Peak Forward Surge Current (8.3 mSec single half sine wave superimposed on rated load)	I_{FSM}	60								
Maximum Forward Voltage at 2 Amps DC	V_{FM}	1.3								VOLTS
Maximum Reverse Recovery Time ($I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$)	T_{RR}	150			250	500 (Note 2)			nS	
Maximum Average DC Reverse Current At Rated DC Blocking Voltage	I_{RM}					1.0				μA
						100				
Typical Junction Capacitance (Note 1)	C_J	15								pF
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175								$^\circ\text{C}$

NOTES: (1) Measured at 1MHz & applied reverse voltage of 4 volts
 (2) 300 nS available - consult factory



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RATING & CHARACTERISTIC CURVES FOR SERIES RGP200 - RGP210

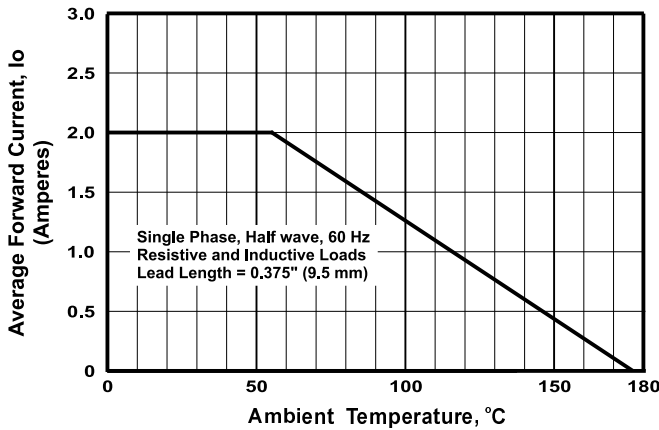


FIGURE 1. FORWARD CURRENT DERATING CURVE

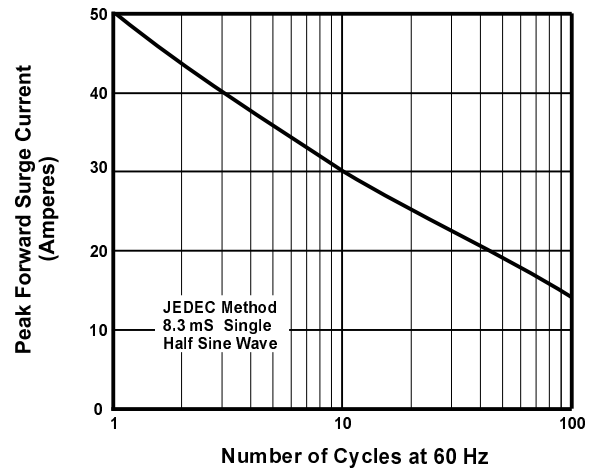


FIGURE 2. MAXIMUM NON-REPETITIVE SURGE CURRENT

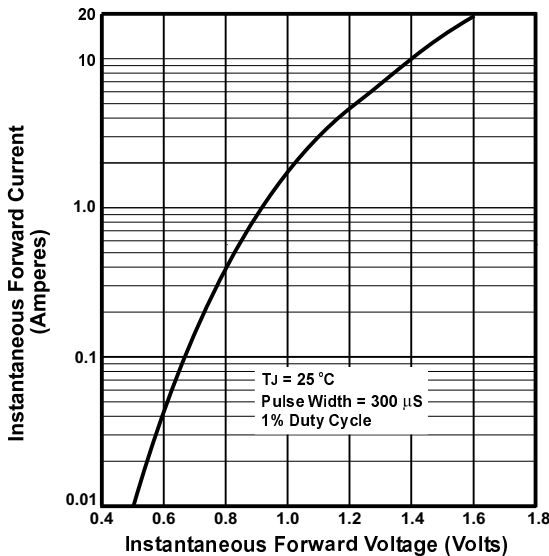


FIGURE 3. TYPICAL FORWARD CHARACTERISTIC

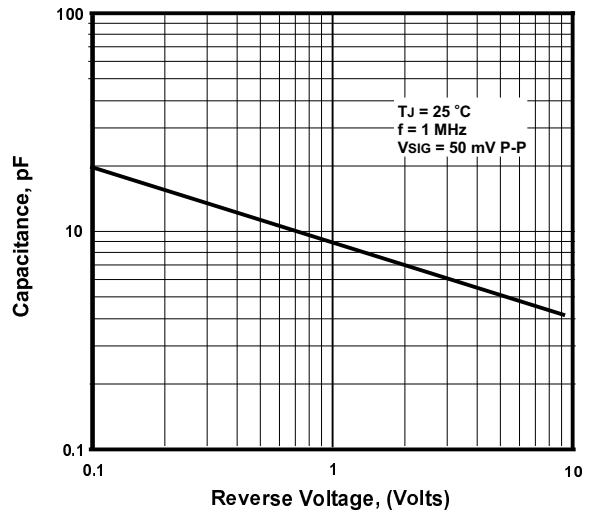


FIGURE 4. TYPICAL JUNCTION CAPACITANCE

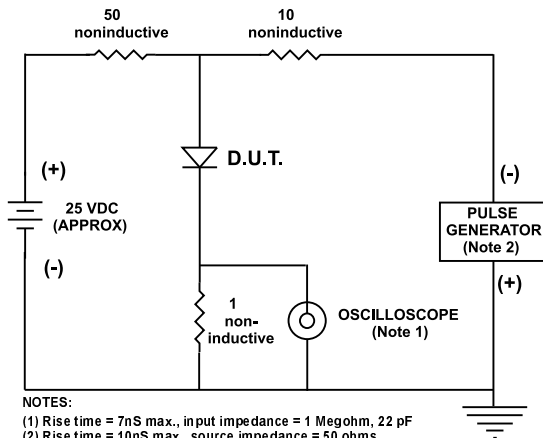


FIGURE 5. REVERSE RECOVERY TEST SETUP AND TIME CHARACTERISTIC