

DIOTEC ELECTRONICS CORP. 18020 Hobart Blvd., Unit B Gardena, CA 90248 U.S.A

Tel.: (310) 767-1052 Fax: (310) 767-7958

2 AMP SOFT GLASS PASSIVATED DIODES

FEATURES

ACTUAL SIZE OF **DO-41 PACKAGE**

SERIES GP200 - GP210

PROPRIETARY JUNCTION PASSIVATION FOR SUPERIOR RELIABILITY AND PERFORMANCE

• VOID FREE VACUUM DIE SOLDERING FOR MAXIMUM **MECHANICAL STRENGTH AND HEAT DISSIPATION** (Solder Voids: Typical ≤ 2%, Max. ≤ 10% of Die Area)

- EXTREMELY LOW LEAKAGE AT HIGH TEMPERATURES
- LOW FORWARD VOLTAGE DROP
- 1A at TA = 75 °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)



<u>DO - 41</u>						
	BD (Dia)	+		<u> </u>	Ĺ	L
	Color Band Denotes ————————————————————————————————————				E	3L
					l	_ _L
	LD (Dia)			_		

MECHANICAL SPECIFICATION

Sym	Mini	mum	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
Series Number		GP200	GP201	GP202	GP204	GP206	GP208	GP210	
Maximum DC Blocking Voltage	Vrm	50	100	200	400	600	800	1000	
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	VOLTS
Maximum Peak Recurrent Reverse Voltage	VRRM	50	100	200	400	600	800	1000	1
Average Forward Rectified Current @ TA = 75 °C, Lead length = 0.375 in. (9.5 mm)	lo	2					4.450		
Peak Forward Surge Current (8.3 mSec single half sine wave superimposed on rated load) 1FSM 70					AMPS				
Maximum Forward Voltage at 2 Amps DC		1.1					VOLTS		
Maximum Reverse Recovery Time (IF=0.5A, IR=1A, IRR=0.25A)	Trr	30							
Maximum Average DC Reverse Current @ TA = 25°C At Rated DC Blocking Voltage @ TA = 100°C	lrm	5 50					μ Α		
Typical Junction Capacitance (Note 1)		40					pF		
Operating and Storage Temperature Range		-65 to +175					°C		

NOTES: (1) Measured at 1MHz & applied reverse voltage of 4 volts

(2) 300 nS available - consult factory

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2 AMP SOFT GLASS PASSIVATED SILICON DIODES

RATING & CHARACTERISTIC CURVES FOR SERIES GP200 - GP210

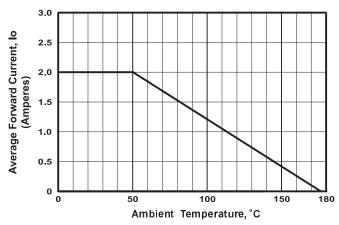


FIGURE 1. FORWARD CURRENT DERATING CURVE

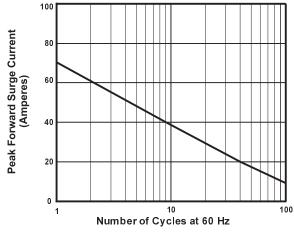


FIGURE 2. MAXIMUM NON-REPETITIVE SURGE CURRENT

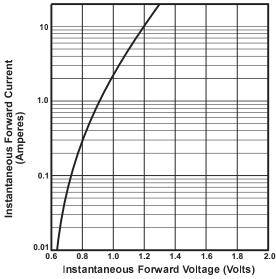
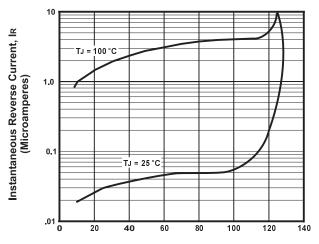


FIGURE 3. TYPICAL FORWARD CHARACTERISTIC PER DIODE



Percent of Rated Peak Reverse Voltage

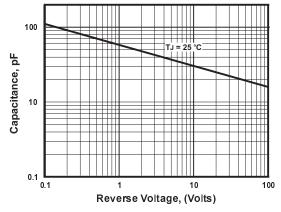


FIGURE 5. TYPICAL JUNCTION CAPACITANCE PER DIODE

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