

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

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

6 AMP GENERAL PURPOSE SILICON DIODES

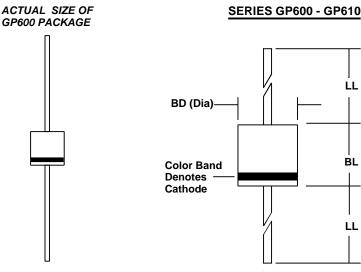
FEATURES

- Low cost
- Low leakage
- Low forward voltage drop
- High current capacity
- Easily cleaned with freon, alcohol, chlorothene and similar solvents

MECHANICAL DATA

- Case: 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: 0.07 Ounces (2.1 Grams)

MECHANICAL SPECIFICATION



Sym	Mini	mum	Maximum				
	ln	mm	ln	mm			
BL	0.340	8.6	0.360	9.1			
BD	0.340	8.6	0.360	9.1			
LL	1.00	25.4					
LD	0.048	1.2	0.052	1.3			

LD (Dia) -

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)		RATINGS							UNITS	
Series Number		GP600	GP601	GP602	GP604	GP606	GP608	GP610		
Maximum DC Blocking Voltage	Vrm	50	100	200	400	600	800	1000	VOLTS	
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700		
Maximum Peak Recurrent Reverse Voltage	VRRM	50	100	200	400	600	800	1000]	
Average Forward Rectified Current @ TA = 60 °C, Lead length = 0.375 in. (9.5 mm)	lo	6						AMPS		
Peak Forward Surge Current (8.3 mSec single half sine wave superimposed on rated load)	IFSM	400								
Maximum Forward Voltage at 6 Amps DC	VFM	1						VOLTS		
Maximum Full Cycle Reverse Current @ TL = 75 °C (Note 1)	IRM(AV)	25						μ Α		
Maximum Average DC Reverse Current @ TA = 25°C At Rated DC Blocking Voltage @ TA = 100°C	IRM	10 100								
Typical Thermal Resistance, Junction to Ambient (Note 1)		10						°C/W		
Typical Junction Capacitance (Note 2)		100						pF		
Operating and Storage Temperature Range	TJ, TSTG	-65 to +175						°C		

NOTES: (1) Lead length = 0.375 in. (9.5 mm)
(2) Measured at 1MHz & applied reverse voltage of 4 volts

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RATING & CHARACTERISTIC CURVES FOR SERIES GP600 - GP610

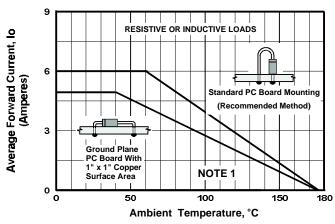
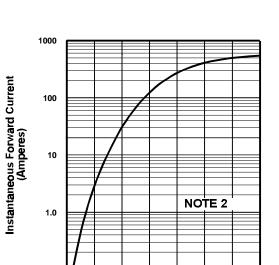


FIGURE 1. FORWARD CURRENT DERATING CURVE



Instantaneous Forward Voltage (Volts)

FIGURE 3. TYPICAL FORWARD CHARACTERISTICS

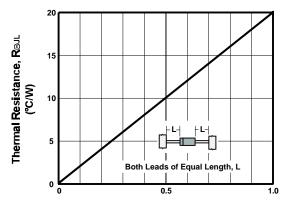
1.2

1.4

1.8

1.0

8.0



Lead Length toHeat Sink, L (Inches)

FIGURE 5. TYPICAL THERMAL RESISTANCE

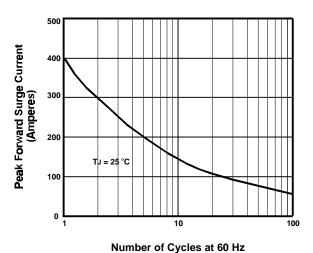


FIGURE 2. MAXIMUM NON-REPETITIVE SURGE CURRENT

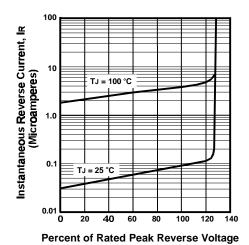


FIGURE 4. TYPICAL REVERSE CHARACTERISTICS

NOTES

- (1) Single Phase, Half Wave, 60 Hz
- (2) TJ = 25 °C, Pulse Width = 300 μ Sec, 1.0% Duty Cycle