# DACO SEMICONDUCTOR CO.,LTD.

**PFL2501(R) THRU PFL2507(R)**

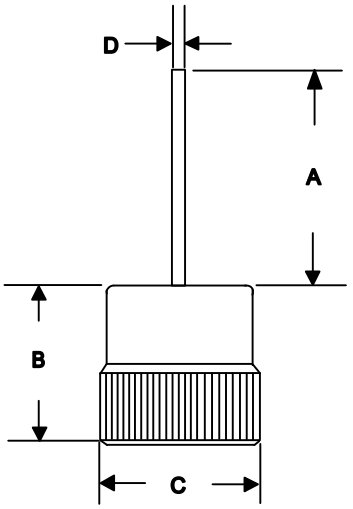
## INDUSTRIAL PRESS-FIT POWER RECTIFIERS TYPE 25A

## Features

- High Surge Capability
- High Voltage Available
- Designed For A Wide Range of Application
- Leaded Version Available
- Types Up to 1000V $V_{RRM}$
- Open junction

25Amp Rectifier
50-1000 Volts

PRESS - FIT
LUCAS




## Maximum Ratings

Operating Temperature: -65℃ to +190 ℃
Storage Temperature: -65℃ to +190 ℃

| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|---|---|---|---|
| PFL2501(R) | 50V | 35V | 50V |
| PFL2502(R) | 100V | 70V | 100V |
| PFL2503(R) | 200V | 140V | 200V |
| PFL2504(R) | 400V | 280V | 400V |
| PFL2505(R) | 600V | 420V | 600V |
| PFL2506(R) | 800V | 560V | 800V |
| PFL2507(R) | 1000V | 700V | 1000V |

## Electrical Characteristics @ 25 ℃ Unless Otherwise Specified

| | | | |
|---|---|---|---|
| Average Forward Current | $I_{F(AV)}$ | 25A | $T_C$ = 100 ℃ |
| Peak Forward Surge Current | $I_{FSM}$ | 400A | 8.3ms , half sine |
| Maximum Instantaneous Forward Voltage * | $V_F$ | 1.0V | $I_{FM}$ = 25A; $T_J$ = 25 ℃ |
| Maximun Instanteous DC Reverse Current At Rated DC Blocking Voltage | $I_R$ | 10uA<br>500uA | $T_J$ = 25 ℃<br>$T_J$ = 150 ℃ |
| Maximum thermal resistance, junction to case | $R_{\theta}jc$ | 1.2 ℃ /w | |

*Pulse Test: Pulse Width 300 usec, Duty Cycle 2%

Notes:
1.Standard Polarity:Lead is Cathode
2.Reverse Polarity: Lead is Anode

| DIMENSIONS | | | | | |
|---|---|---|---|---|---|
| | INCHES | | MM | | |
| DIM | MIN | MAX | MIN | MAX | NOTE |
| A | 0.834 | 0.857 | 21.19 | 21.78 | |
| B | 0.336 | 0.343 | 8.53 | 8.70 | |
| C | 0.398 | 0.400 | 10.11 | 10.16 | |
| D | 0.050 | 0.051 | 1.29 | 1.30 | |

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

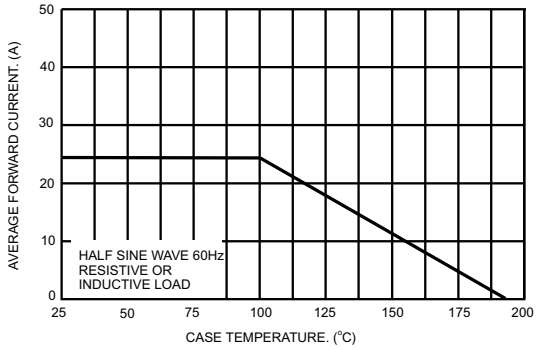



FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

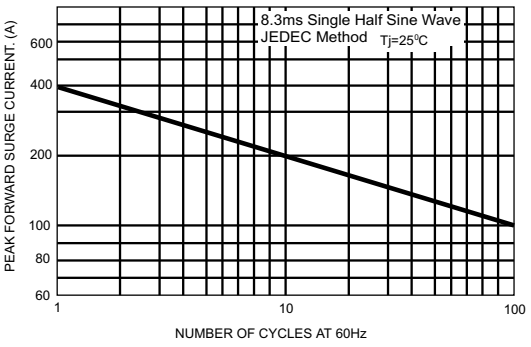



FIG.3- TYPICAL FORWARD CHARACTERISTICS

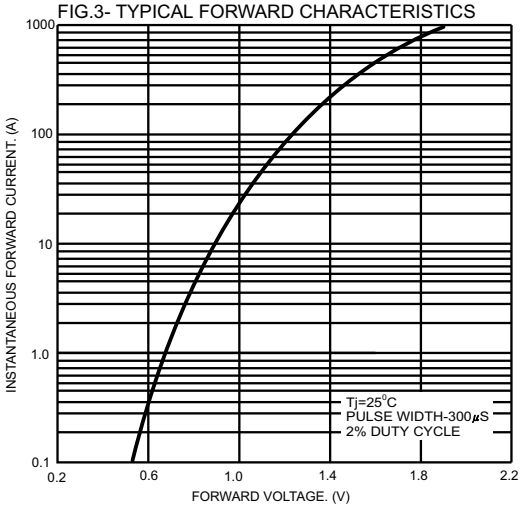



FIG.4- TYPICAL REVERSE CHARACTERISTICS