

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number: DL4005-13-F
Manufacturer: Diodes Incorporated
Package: DO-213AB, MELF (Glass)
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/diodes-incorporated/dl4005-13-f.html>

Request a Quote:

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Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

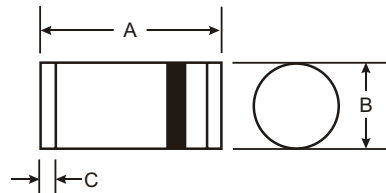
Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

Features

- Glass Passivated Junction
- High Current Capability
- Low Forward Voltage Drop
- High Reliability and Low Leakage
- For Surface Mount Application
- Plastic Material - UL Flammability Classification Rating 94V-0



Mechanical Data

- Case: MELF, Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode band
- Approx Weight: 0.25 grams
- Mounting Position: Any

MELF		
Dim	Min	Max
A	4.80	5.20
B	2.40	2.60
C	0.55 Nominal	
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	DL 4001	DL 4002	DL 4003	DL 4004	DL 4005	DL 4006	DL 4007	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	71	141	283	424	566	707	V
Maximum Average Forward Rectified Current @ Terminal Temp @ $T_T = 75^\circ\text{C}$	I_O	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30							A
Maximum Forward Voltage @ $I_F = 1.0\text{A}$	V_F	1.1							V
Maximum dc Reverse Current @ $T_A = 25^\circ\text{C}$	I_R	5.0							μA
Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$		50							
Typical Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	50							K/W
Typical Junction Capacitance (Note 1)	C_j	15							pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

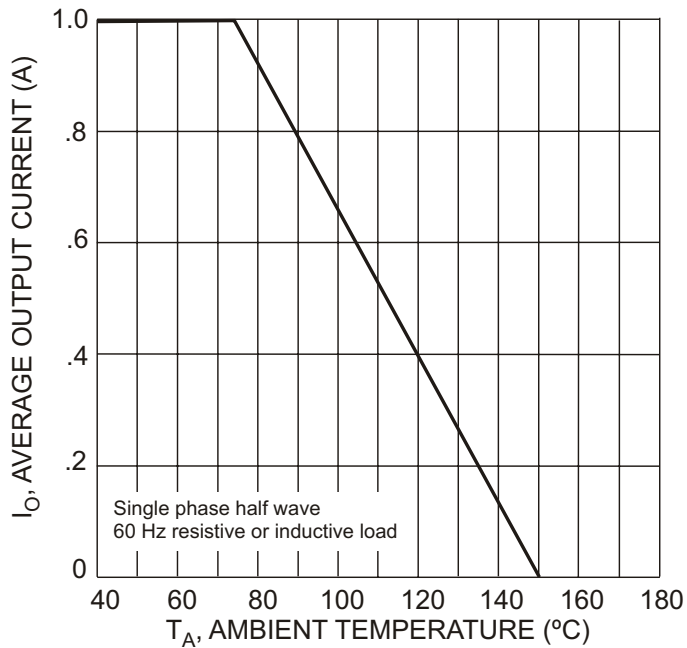


Fig. 1 Forward Current Derating Curve

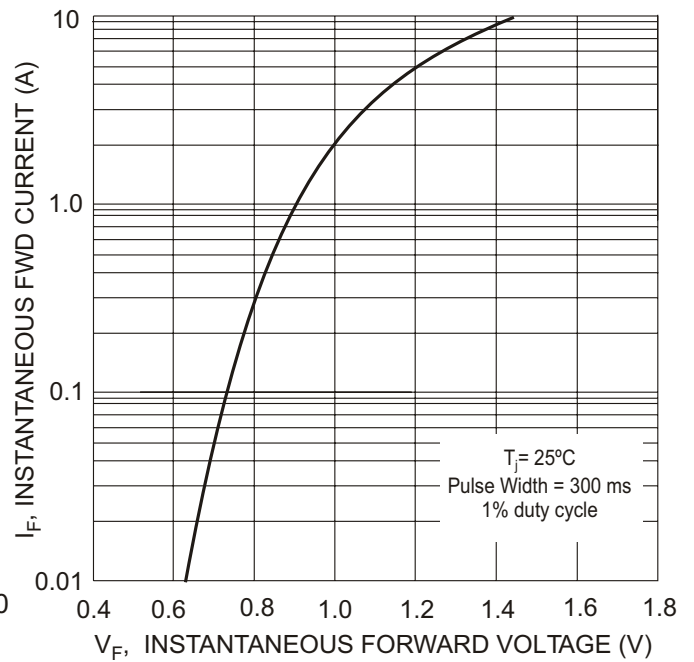


Fig. 2 Typical Forward Characteristics

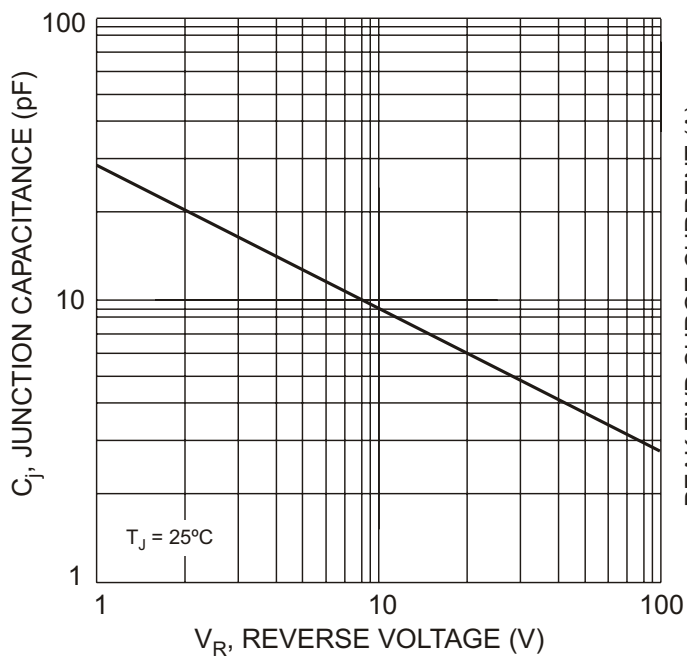


Fig. 3 Typical Junction Capacitance

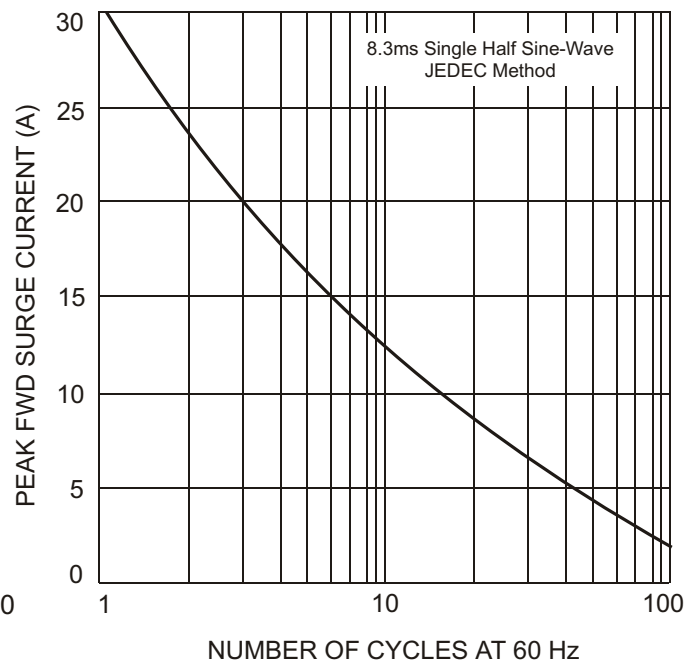


Fig. 4 Max Non-Repetitive Peak Fwd Surge Current