

Surface Mount Rectifier



Features:

- Glass Passivated Device
- Ideal for Surface Mounted Applications
- Low Leakage Current
- Metallurgically Bonded Construction

Mechanical Data:

- Case: JEDEC DO-213AB, Molded Plastic Over Passivated Chip
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Colour Band Denotes Cathode End
- Weight: 0.0046oz, 0.116g
- Mounting Position: Any

Maximum Ratings and Electrical Characteristics:

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate by 20%.

Characteristics	Symbol	DL4002-13-F	DL4004-13-F	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	100	400	V
Maximum RMS voltage	V_{RMS}	70	280	V
Maximum DC blocking voltage	V_{DC}	100	400	V
Maximum average forward rectified current at $T_A=75^\circ\text{C}$	$I_{(AV)}$	1		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30		A
Maximum instantaneous forward voltage at 1A	V_F	1.1		V
Maximum reverse current at $T_A=25^\circ\text{C}$ at rated DC blocking voltage at $T_A=125^\circ\text{C}$	I_R	5 50		μA
Typical junction capacitance (Note 1)	C_J	15		pF
Typical thermal resistance (Note 2)	$R_{\theta JL}$	20		$^\circ\text{C/W}$
Typical thermal resistance (Note 3)	$R_{\theta JA}$	50		$^\circ\text{C/W}$
Operating and Storage junction temperature range	T_J, T_{STG}	- 55 to +150		$^\circ\text{C}$

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

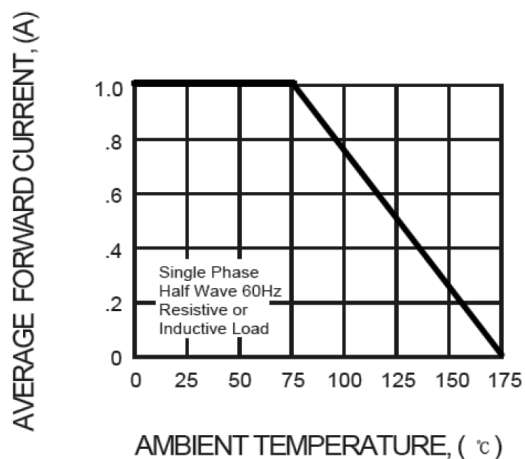


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

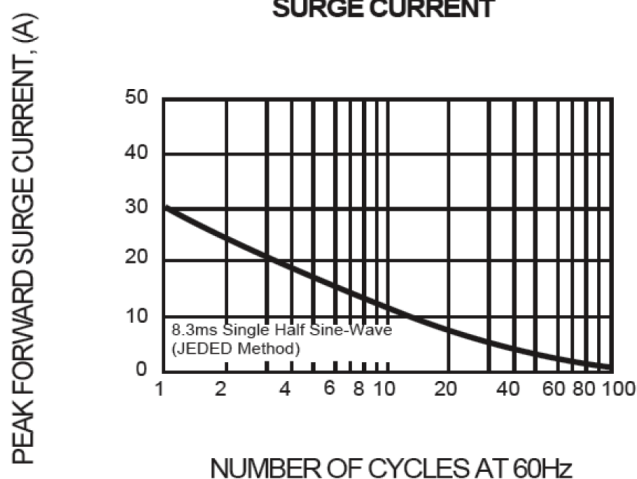


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

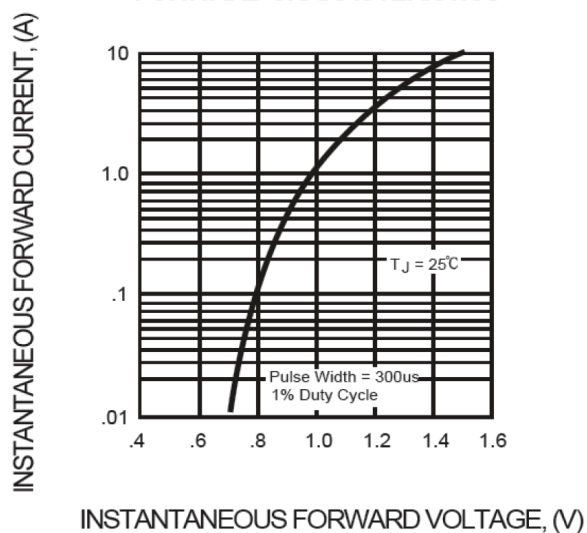


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

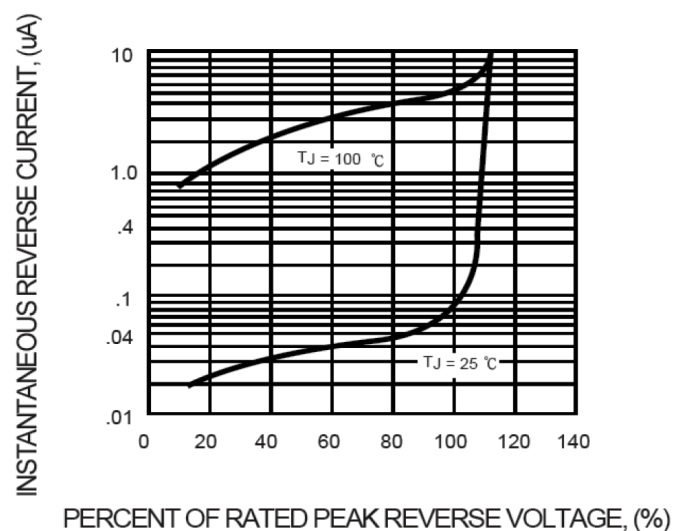
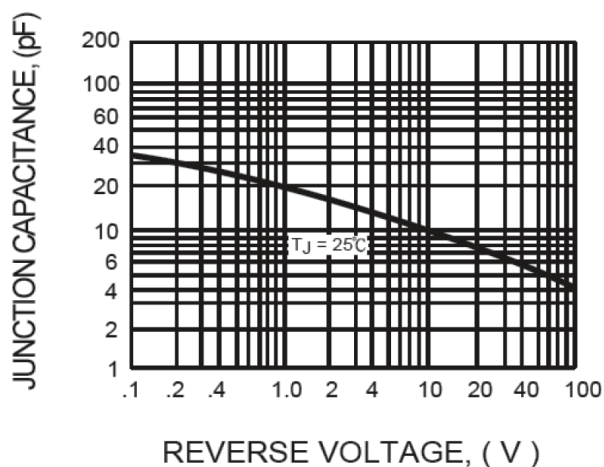
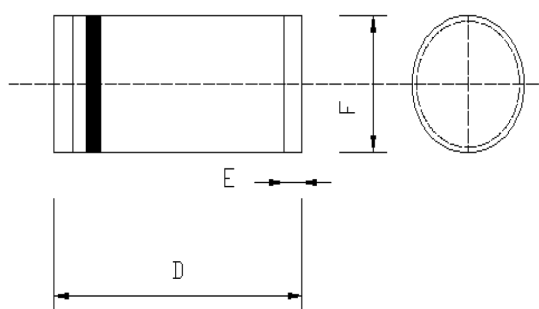


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



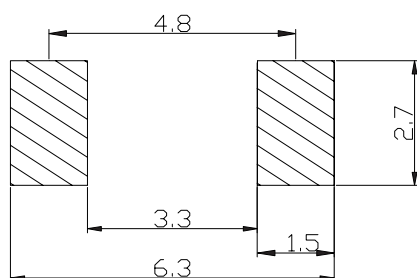
Package Outline:



DO-213AB		
Dim.	Min.	Max.
D	4.7	5.2
E	0.25	0.55
F	2.45	2.85

Dimensions : Millimetres

Soldering Footprint:



Dimensions : Millimetres

Package Information:

Device	Package	Shipping
DL4002-13-F & DL4004-13-F	DO-213AB	5,000 / Tape & Reel

Part Number Table

Description	Part Number
Surface Mount Rectifier	DL4002-13-F
	DL4004-13-F

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