DL4001 THRU DL4007

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

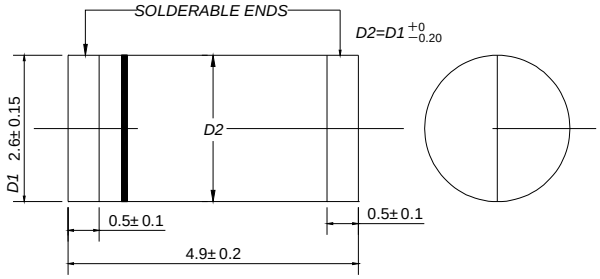
SURFACE MOUNT RECTIFIER

Features

DO-213AB

RoHS COMPLIANT

- The plastic package carries Underwrites Laboratory
- Flammability classification 94V-0
- For surface mounted application



Dimensions in millimeters

Mechanical Data

Case : JEDEC DO-213AB Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight: 0.0046 ounces ,0.116 gram

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter / Marking Code	SYMBOLS	MDD DL4001	MDD DL4002	MDD DL4003	MDD DL4004	MDD DL4005	MDD DL4006	MDD DL4007	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at TL=110℃	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	30							A
Maximum instantaneous forward voltage at 1.0A	V_F	1.10							V
Maximum DC reverse current TA=25℃ / at rated DC blocking voltage TA=125℃	I_R	5.0 / 50							uA
Typical junction capacitance (NOTE 1)	C_J	15.0							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50.0							℃/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +175							℃

NOTES:1. Measured at 1.0MHz and applied average voltage of 4.0V DC.

2. Thermal resistance junction to lead, 6.0 mm^2 coppeer pads to each terminal.

Ratings And Characteristic Curves

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

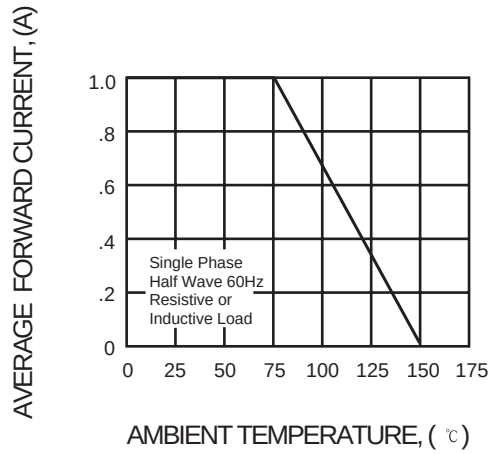


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

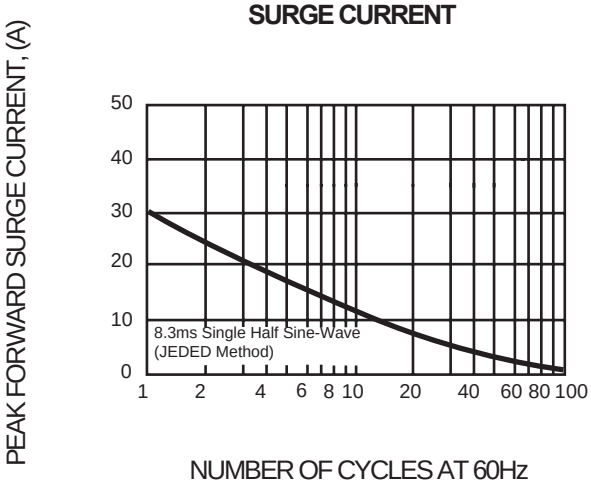


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

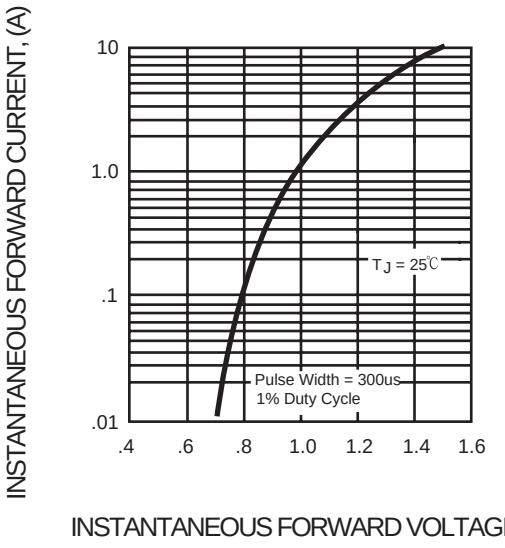


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

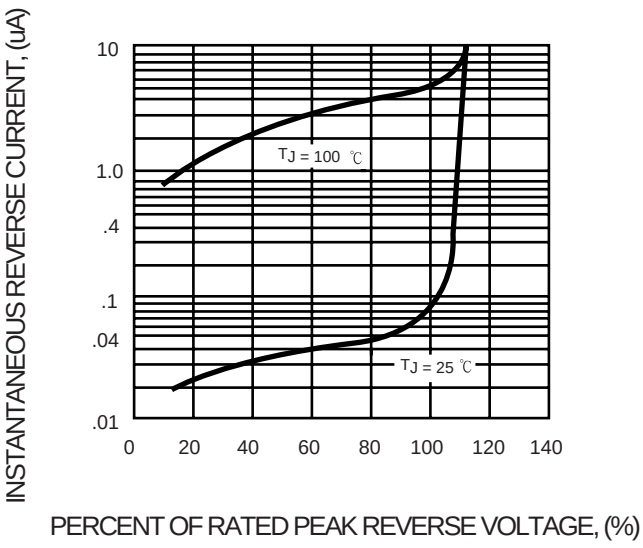


FIG. 5 - TYPICAL JUNCTION CAPACITANCE