

Features

1. The plastic package carries Underwriters
2. Laboratory Flammability classification 94V-0
3. For surface mounted application

Mechanical Data

Case : JEDEC DO-213AA Molded plastic body

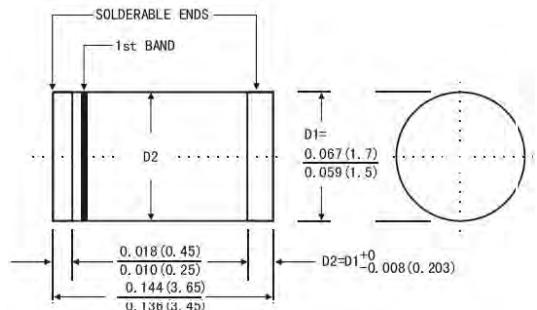
Terminals : Solder plated, solderable per

MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

DO-213AA



Dimensions in millimeters

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 current derate by 20%.

Parameter	SYMBOLS	LM4001	LM4002	LM4003	LM4004	LM4005	LM4006	LM4007	UNITS
Marking Code		LM4001	LM4002	LM4003	LM4004	LM4005	LM4006	LM4007	
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°C	I _(AV)				1.0				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}				25				A
Maximum instantaneous forward voltage at 1.0A	V _F				1.10				V
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=125°C	I _R				5.0				uA
Typical junction capacitance (NOTE 1)	C _J				15.0				pF
Typical thermal resistance (NOTE 2)	R _{θJA}				30.0				°C/W
Operating junction and storage temperature range	T _{J,T_{STG}}				-65 to +175				°C

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

2. Thermal resistance junction to lead, 6.0 mm² copper pads to each terminal.

Ratings And Characteristic Curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

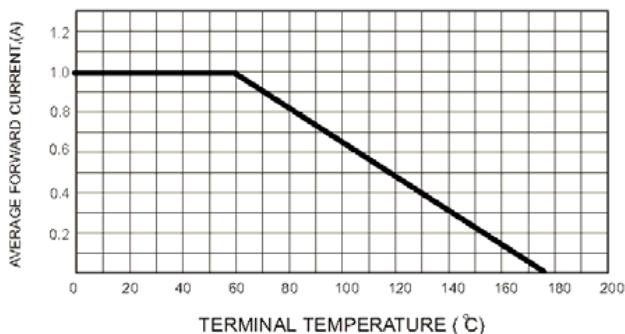


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

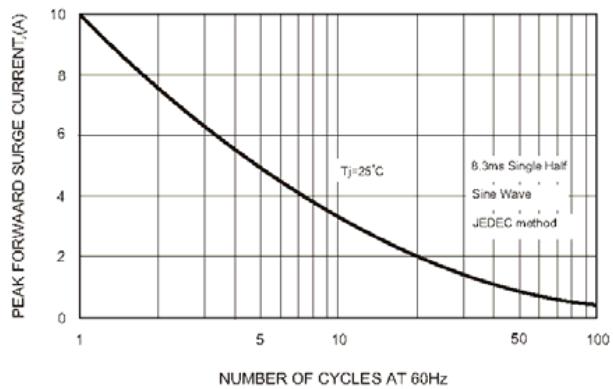


FIG.4-TYPICAL JUNCTION CAPACITANCE

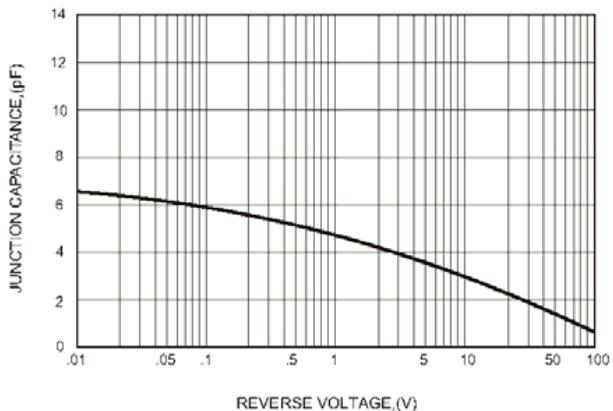


FIG.2-TYPICAL FORWARD CHARACTERISTICS

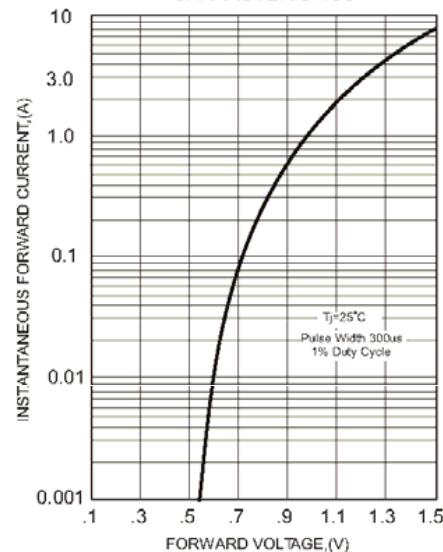


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

