

New Jersey Semi-Conductor Products, Inc.

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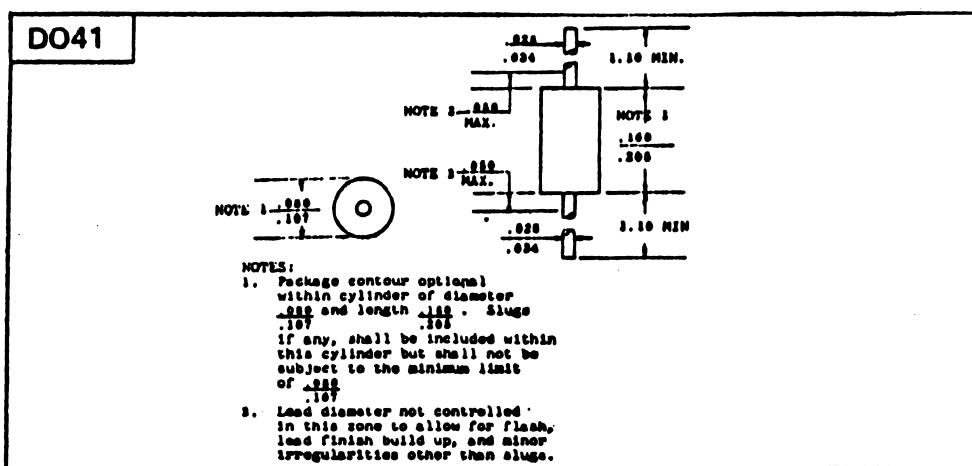
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TYPES 1N4383, 1N4384, 1N4385 DIFFUSED-JUNCTION SILICON RECTIFIERS

200-600 VOLTS • 1 AMP AVG

Designed to Meet Stringent Environmental Requirements

mechanical data



*absolute maximum ratings at specified ambient temperature

		1N4383	1N4384"	1N4385	UNIT
$V_{AM(\text{avg})}$	Working Peak Reverse Voltage from 25°C to 175°C (See Note 1)	200	400	600	v
$V_{AM(\text{rep})}$	Repetitive Peak Reverse Voltage from 25°C to 175°C (See Note 2)	200	400	600	v
$V_{AM(\text{narrow})}$	Nonrepetitive Peak Reverse Voltage from 25°C to 175°C (See Note 3)	200	400	600	v
V_R	Steady State Reverse Voltage from 25°C to 175°C	200	400	600	v
I_o	Average Rectified Forward Current from 25°C to 100°C (See Notes 1 and 4)		1		a
$I_{PM(\text{surge})}$	Peak Surge Current, One Cycle, at 100°C (See Note 3)		50		a
$T_A(\text{opt})$	Operating Ambient Temperature Range		-65 to +175		°C
T_{S1g}	Storage Temperature Range		-65 to +175		°C
	Lead Temperature ½ Inch from Case for 10 Seconds		300		°C

NOTES:

1. These values may be applied continuously under single-phase, 60-cps, half-sine-wave operation with resistive load. Above 100°C, derate I_O according to Figure 1.
2. These values apply for 100-μsec pulses, 60 cps, superimposed on single-phase, 60-cps, half sine waves.
3. These values apply for one 60-cps half sine wave when the device is operating at (or below) rated values of peak reverse voltage and average rectified forward current. Surge may be repeated after the device has returned to original thermal equilibrium.
4. The glass-packaged rectifier is a lead-conduction-cooled device. At (or above) ambient temperatures of 100°C, the lead temperature 36 inch from case must be no higher than 50°C above the ambient temperature for these ratings to apply.

*Indicates JERFF unpublished data.

[†]The ambient temperature is measured at a point 2 inches below the device. Natural air cooling shall be used.