



1.0A Rectifier

Features

1. High current capability
2. Low reverse leakage current
3. Low forward voltage drop
4. Plastic material – UL recognition flammability classification 94V – 0



Absolute Maximum Ratings

$T_j=25^{\circ}\text{C}$

Parameter	Test Conditions	Type	Symbol	Value	Unit
Repetitive peak reverse voltage = Working peak reverse voltage = DC blocking voltage		1N4001	V_{RRM}	50	V
		1N4002	$=V_{RWM}$	100	V
		1N4003	$=V_R$	200	V
		1N4004		400	V
		1N4005		600	V
		1N4006		800	V
		1N4007		1000	V
Peak forward surge current			I_{FSM}	30	A
Average forward current	$T_A=75^{\circ}\text{C}$		I_{FAV}	1	A
Storage temperature range			T_{stg}	-65~+175	$^{\circ}\text{C}$

Electrical Characteristics

$T_j=25^{\circ}\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=1\text{A}$		V_F			1	V
Reverse current	$T_A=25^{\circ}\text{C}$		I_R			5	μA
	$T_A=100^{\circ}\text{C}$		I_R			50	μA
Diode capacitance	$V_R=4\text{V}$, $f=1\text{MHz}$		C_D		15		pF

Excel Semiconductor



Characteristics ($T_j=25^\circ\text{C}$ unless otherwise specified)

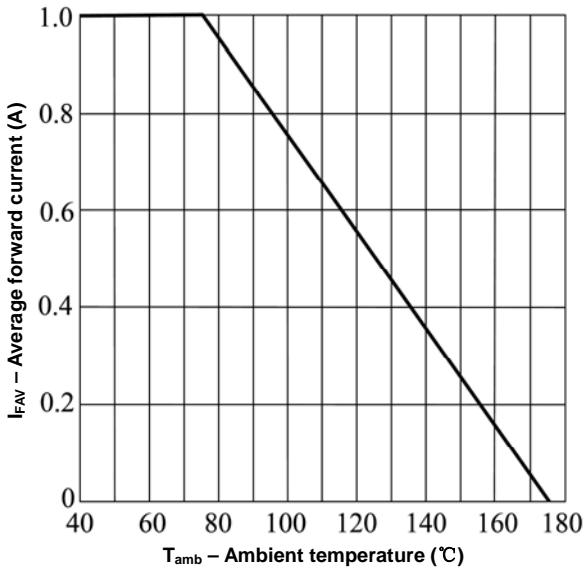


Figure 1. Max. Average forward current vs. ambient temperature

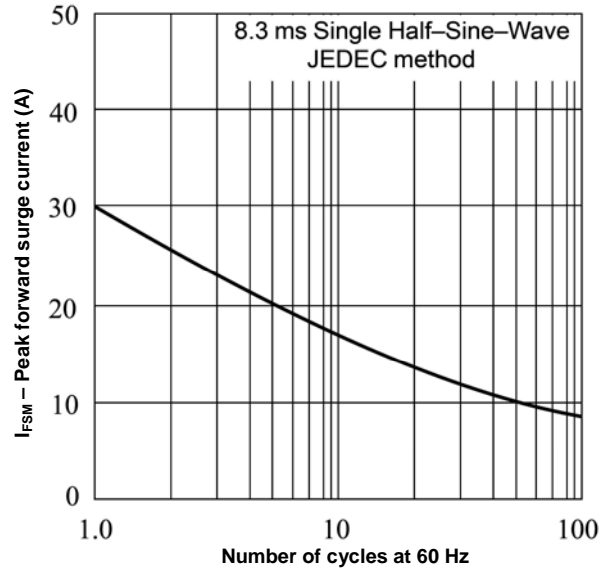


Figure 2. Max. Peak forward surge current vs. Number of cycles

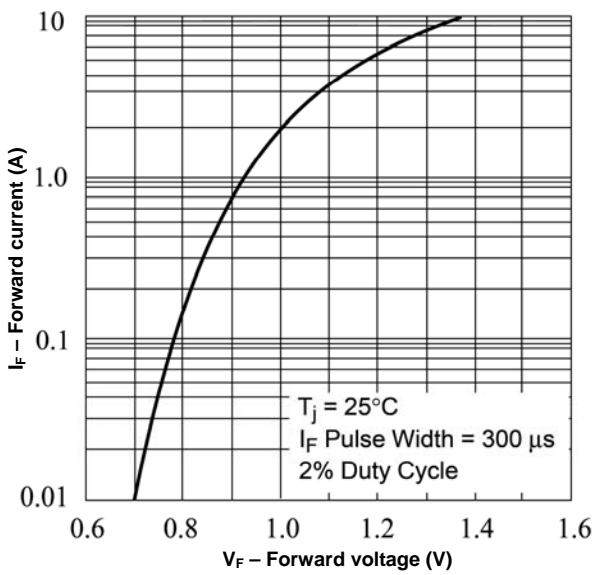


Figure 3. Typ. forward current vs. forward voltage

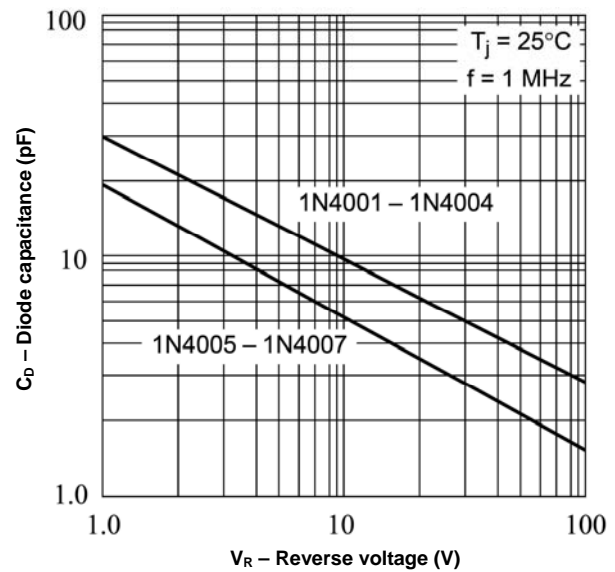
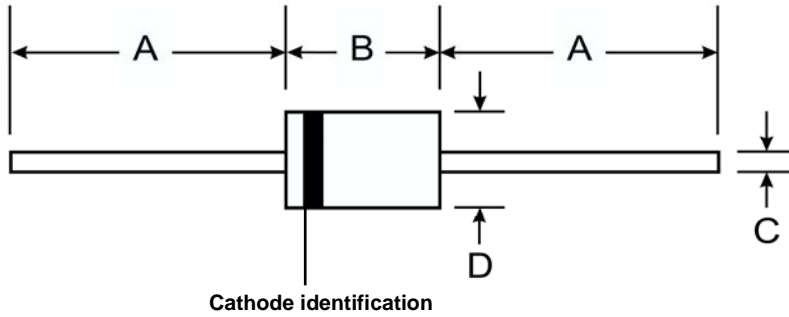


Figure 4. Typ. diode capacitance vs. reverse voltage



Dimensions in mm



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	1.000	---	25.40	---
B	0.166	0.205	4.10	5.20
C	0.028	0.034	0.70	0.90
D	0.080	0.107	2.00	2.70

Case: molded plastic DO-41

Polarity: cathode band

Marking: type number

Marking

