



1N4001-1N4007 General Purpose Rectifier

Feature

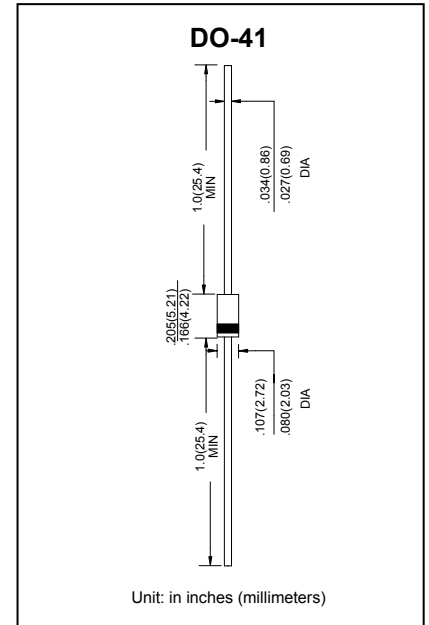
- I_o 1A
- V_{RRM} 50V-1000V
- Low reverse leakage
- High surge current capability

Application

- Rectifier

Application

- 1N400X
X : From 1 To 7



ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	1N40							Unit
		01	02	03	04	05	06	07	
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
Average Forward Current 60Hz Half-sine wave, Resistance load, $T_a=50^\circ\text{C}$	$I_{F(AV)}$	1							A
Non-repetitive Peak Forward Surge Current 60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	I_{FSM}	30							A
Junction Temperature	T_J	-55 ~ +125							$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150							$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Max	Unit	
Peak Forward voltage	V_{FM}	$I_{FM}=1\text{A}$	1.1	V	
Peak Reverse Current	I_{RRM1}	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$	5	μA
	I_{RRM2}		$T_a=125^\circ\text{C}$	50	μA
Thermal Resistance (Typical)	$R_{\theta J-A}$	Between junction and ambient	55	$^\circ\text{C/W}$	
	$R_{\theta J-L}$	Between junction and lead	25	$^\circ\text{C/W}$	

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

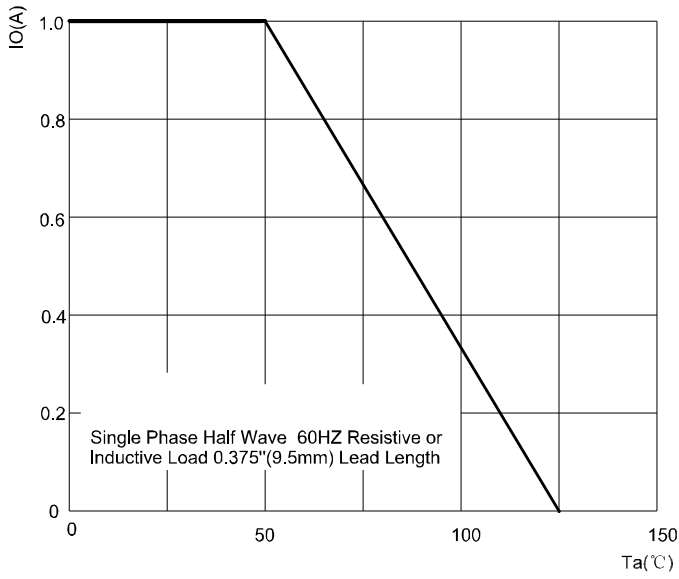


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

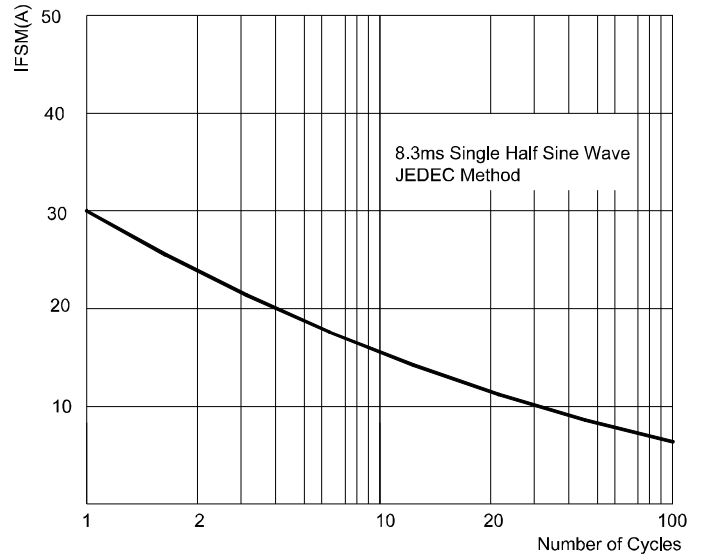


FIG.3: TYPICAL FORWARD CHARACTERISTICS

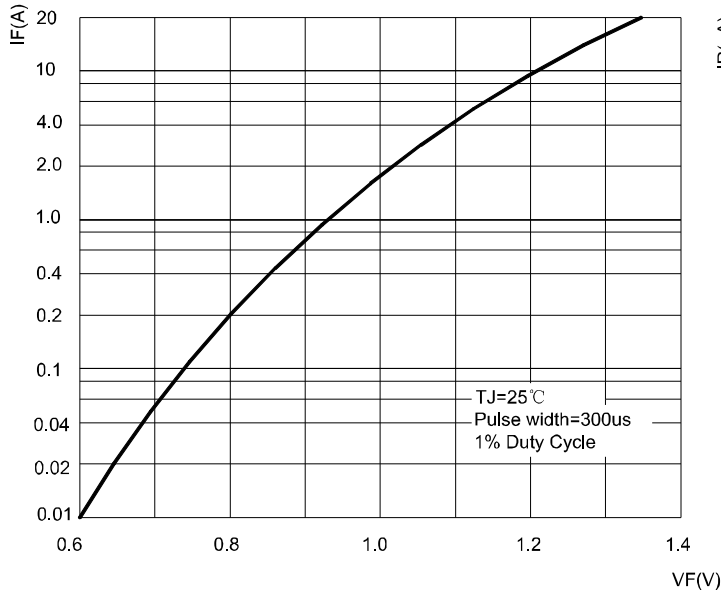


FIG.4: TYPICAL REVERSE CHARACTERISTICS

