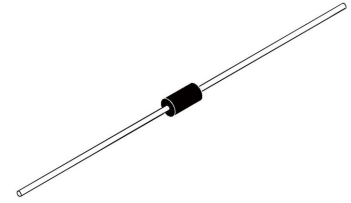


GENERAL PURPOSE RECTIFIER DIODE

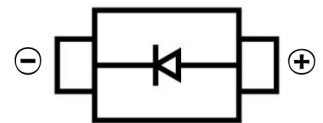
FEATURES

- Surface Mount device
- Low Reverse voltage leakage current
- Glass passivated junction
- High forward surge current capability
- Low forward voltage drop


DO-41

MECHANICAL DATA

- Case: **DO-41**
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.0155 grams (approximate)



MARKING: 1N400X

X : From 1 To 7

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

Parameter	Symbol	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
DC Blocking Reverse Voltage	V_R	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	I_F	1							A
Non-Repetitive Peak Forward Surge Current (@t=8.3ms)	I_{FSM}	30							A
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	120							$^\circ\text{C/W}$
Junction and Storage Temperature Range	T_J, T_{STG}	-55 ~ +150							$^\circ\text{C}$

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

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F			1.1	V	$I_F=1\text{A}$
Reverse current	I_R			5	μA	$V=V_R$
				50		$V=V_R, T_a=125^\circ\text{C}$
Diode capacitance	C_D		9		pF	$V_R=4V_{DC}, f=1\text{MHz}$

GENERAL PURPOSE RECTIFIER DIODE

FIG.1: FORWARD CURRENT DERATING CURVE

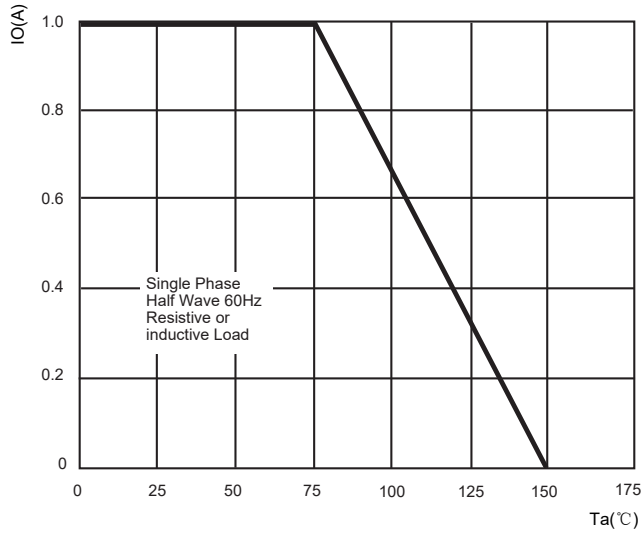


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

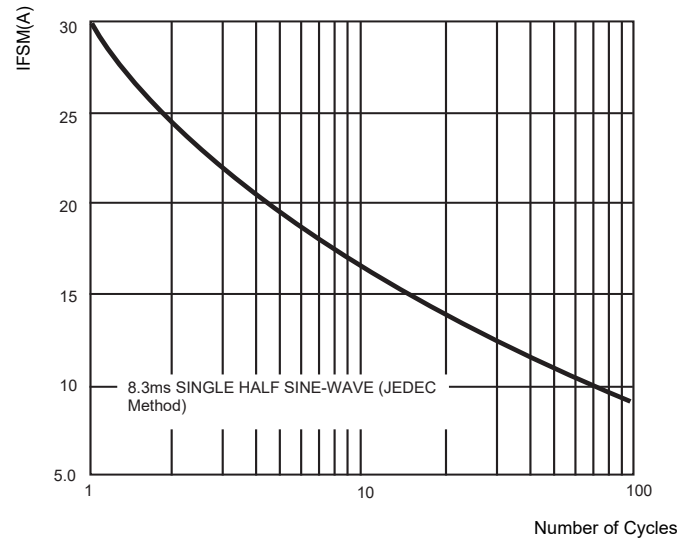


FIG.3: TYPICAL FORWARD CHARACTERISTICS

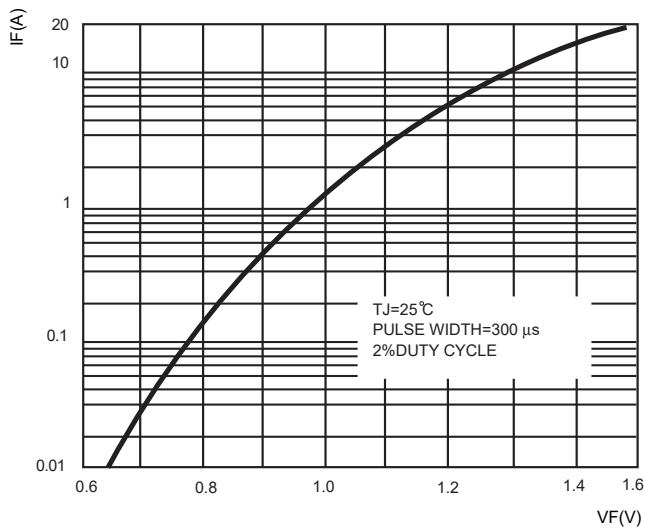
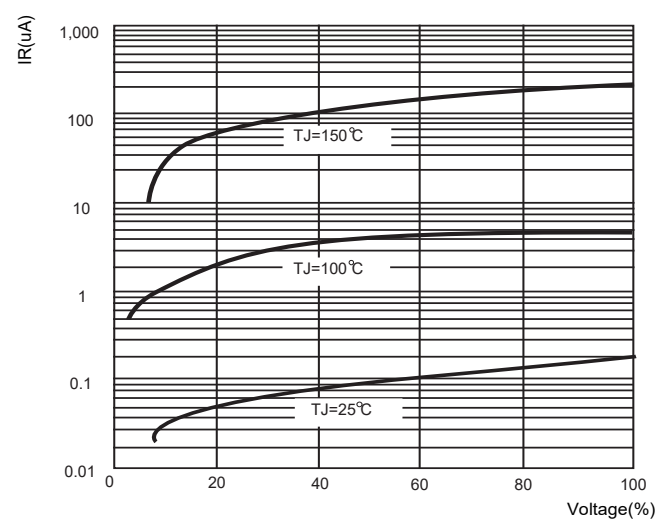


FIG.4: TYPICAL REVERSE CHARACTERISTICS



GENERAL PURPOSE RECTIFIER DIODE

DO-41 Package Outline Dimensions

