

# 11DF1 - 11DF2

# ULTRA FAST RECTIFIER DIODES

**PRV : 100 - 200 Volts**

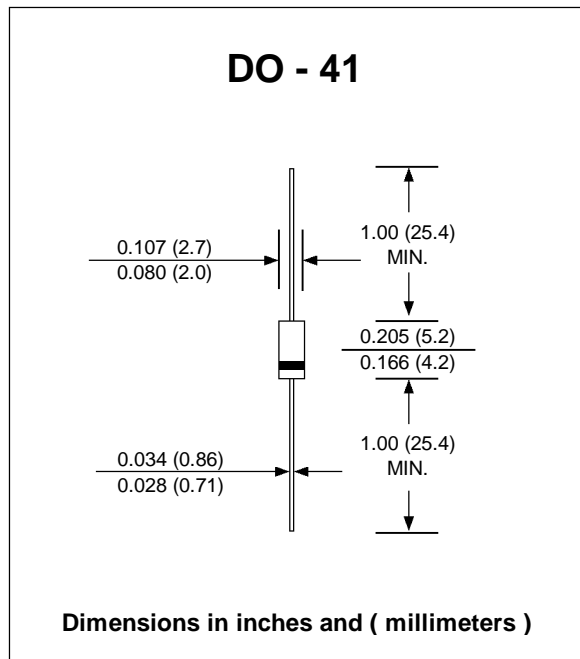
**Io : 1.0 Ampere**

### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Superfast recovery time

### MECHANICAL DATA :

- \* Case : DO-41 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.339 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

RATING	SYMBOL	11DF1	11DF2	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	100	200	V
Maximum RMS Voltage	VRMS	70	140	V
Maximum DC Blocking Voltage	VDC	100	200	V
Maximum Average Forward Current Ta = 63 °C	IF(AV)	1.0		A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	30		A
Maximum Peak Forward Voltage at IF = 1.0 A	VF	0.98		V
Maximum DC Reverse Current at VRRM	IR	10		µA
Maximum Reverse Recovery Time ( Note 1 )	Trr	35		ns
Junction Temperature Range	TJ	- 65 to + 150		°C
Storage Temperature Range	TSTG	- 65 to + 150		°C

**Note :** ( 1 ) Reverse Recovery Test Conditions :  $I_F = 0.5 \text{ A}$ ,  $I_R = 1.0 \text{ A}$ ,  $I_{rr} = 0.25 \text{ A}$ .

## RATING AND CHARACTERISTIC CURVES ( 11DF1 - 11DF2 )

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

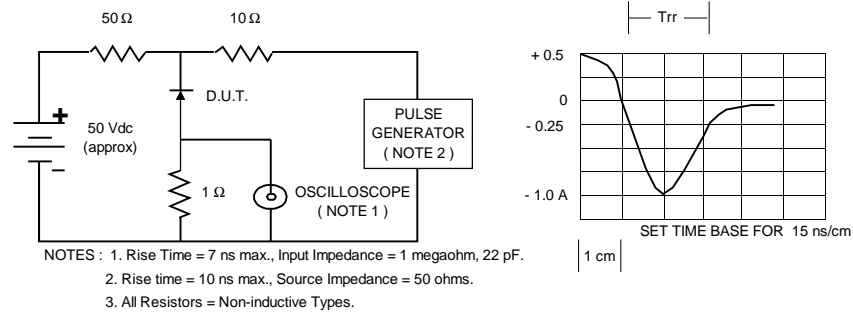


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

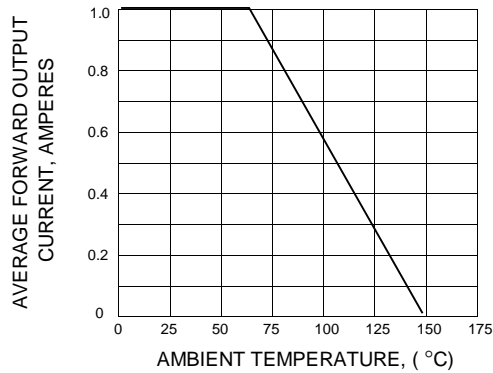


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

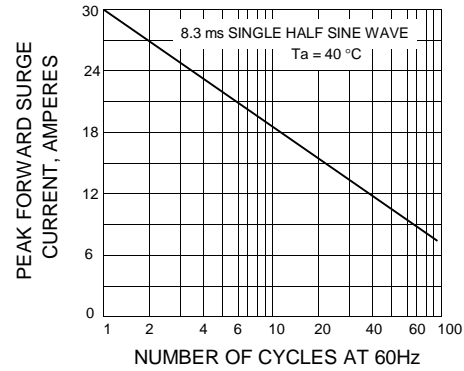


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

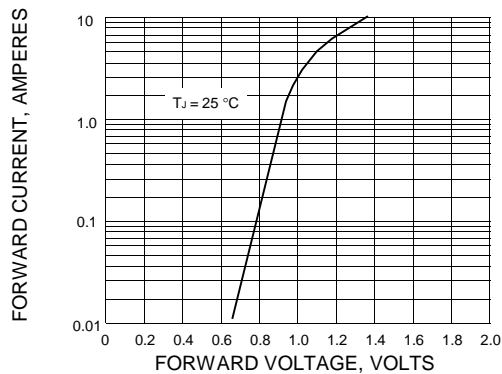


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

