

Fast Recovery Silicon Rectifiers

Reverse Voltage - 100 to 1000 V

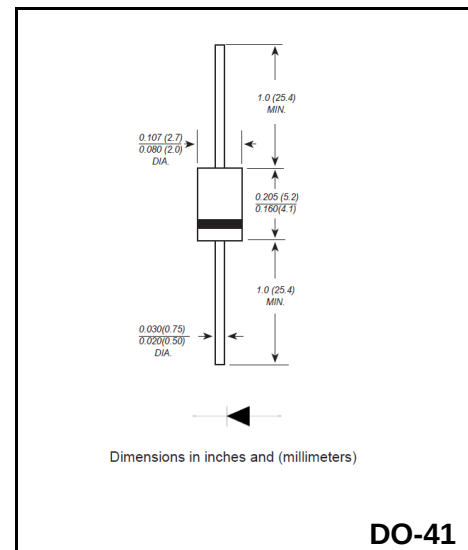
Forward Current - 1 A

FEATURES

- ◆For surface mounted applications
- ◆Low profile package
- ◆Open Junction chip
- ◆Ideal for automated placement
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆Case: DO-41
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 0.25g / 0.0088oz



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	FR102G	FR103G	FR104G	FR105G	FR106G	FR107G	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_c = 100\text{ }^{\circ}\text{C}$	$I_{F(AV)}$	1.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30.0						A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.28						V
Maximum DC Reverse Current $T_a = 25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a=125\text{ }^{\circ}\text{C}$	I_R	10 500						μA
Maxinum reverse recovery time ^(Note 1)	T_{rr}	150			250	500		nS
Typical Junction Capacitance ^(Note 2)	C_j	21.0						pF
Typical Thermal Resistance	$R_{\theta JA}$	65						$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						$^{\circ}\text{C}$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Reverse recovery time test condition: $I_F=0.5\text{A}$ $I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

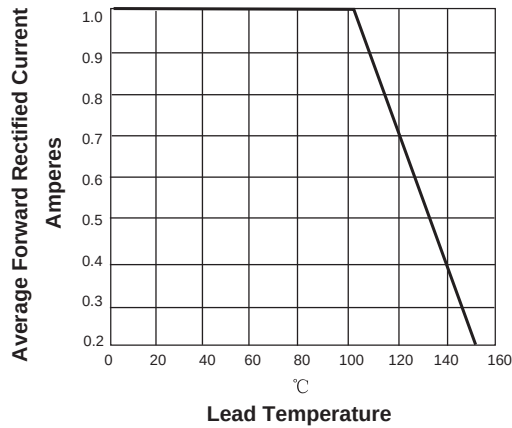


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

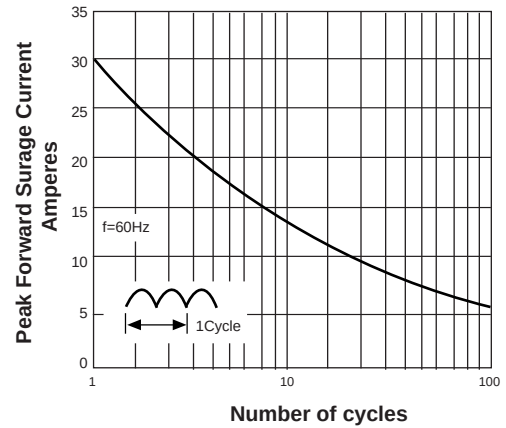


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

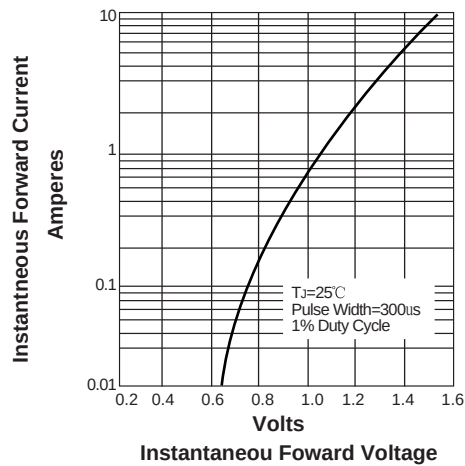
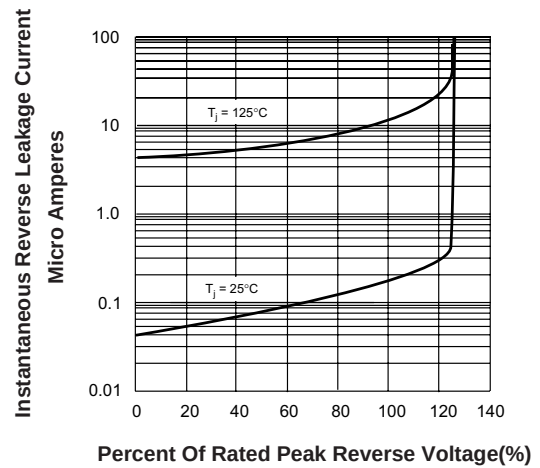
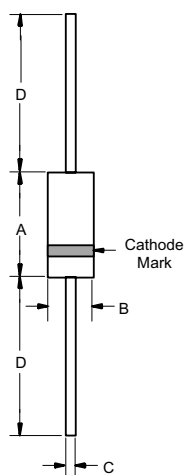


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Package Outline DO-41



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	—	25.40	—	

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-41	BOX	1000/5000	EIA-481-1

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Rectifiers](#) category:

Click to view products by [YFW Electronics](#) manufacturer:

Other Similar products are found below :

[RL252-TP](#) [DLA11C-TR-E](#) [JANTX1N5634A](#) [UFS120Je3/TR13](#) [A1N5404G-G](#) [CRF02\(T5L,TEMQ\)](#) [ACGRB207-HF](#) [CLH03\(TE16L,Q\)](#)
[UES1302](#) [ACEFC304-HF](#) [JANTX1N5822US](#) [SM100](#) [NTE5819](#) [NTE5828](#) [NTE5911](#) [NTE5915](#) [NTE6104](#) [NTE6164](#) [NTE6165](#) [NTE6364](#)
[SET130312](#) [NRVUS110VT3G](#) [UES1106](#) [DSI30-08AS-TRL](#) [NRVUS240VT3G](#) [JAN1N649-1](#) [D5FE60-5063](#) [R4000GPS-TP](#)
[DPG60IM300PC-TRL](#) [D20XB60-7101](#) [F11K120](#) [S2G-AQ](#) [S2M-AQ](#) [S3JSMB](#) [S3MSMB](#) [SKN 320/08](#) [SKR 26/08](#) [DTH8S06D](#) [DTH810D](#)
[RU20A](#) [VS-E5TX3006S2LHM3](#) [RGBP310](#) [SFF2060H-P3](#) [HER608](#) [RS2MF](#) [SFRD92-02AEPS](#) [ES1JF](#) [ES2EF](#) [ES2AF](#) [2CL71A](#)