



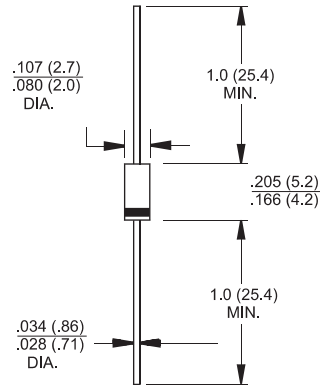
DO-41 / DO-204AL

Features

- ✦ Plastic package has Underwriters Laboratory Flammability Classification 94V0
- ✦ 1.0 ampere operation at $T_A=55^{\circ}\text{C}$ with no thermal runaway
- ✦ Glass passivated chip junction
- ✦ Low cost
- ✦ Ultrafast recovery time for high efficiency
- ✦ High efficiency, low VF
- ✦ Low leakage current
- ✦ High surge current capability

Mechanical Data

- ✦ Case: JEDEC DO-204AL molded plastic body over passivated chip
- ✦ Polarity: Color band denotes cathode
- ✦ Mounting Position: Any
- ✦ High temperature soldering guaranteed: $260^{\circ}\text{C}/10$ seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✦ Weight: 0.35 gram



Dimensions in inches and (millimeters)

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%

Type Number	Symbol	UF 4001	UF 4002	UF 4003	UF 4004	UF 4005	UF 4006	UF 4007	Units
Maximum Recurrent 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
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ $T_A = 55^{\circ}\text{C}$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	1.0				1.7			V
Maximum DC Reverse Current @ $T_A=25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^{\circ}\text{C}$	I_R	5.0				150			μA μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	50				75			nS
Typical Junction Capacitance (Note 2)	C_j	17							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	15				60			$^{\circ}\text{C}/\text{W}$
Operating/Storage Temperature Range	T_J, T_{STG}	-65 to + 150							$^{\circ}\text{C}$

- Notes:
- Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$
 - Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.
 - Thermal Resistance from junction to ambient and from Junction to Lead Length .375"(9.5mm), P.C.B. Mounted.

RATINGS AND CHARACTERISTIC CURVES (UF4001 THRU UF4007)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

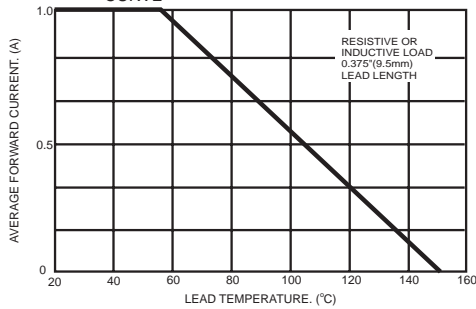


FIG.2- TYPICAL FORWARD CHARACTERISTICS

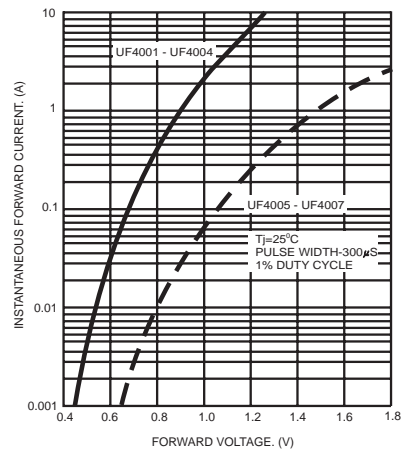


FIG.3- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

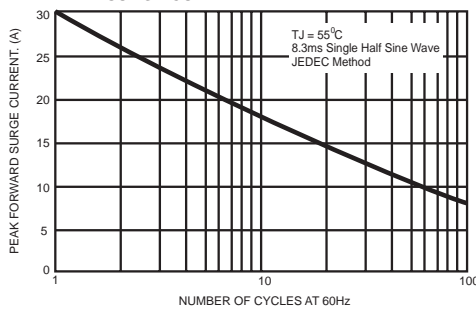


FIG.5- TYPICAL REVERSE CHARACTERISTICS

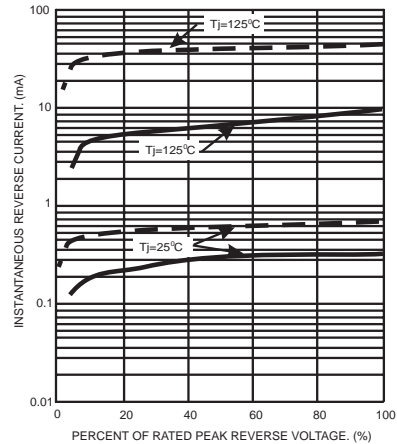


FIG.4- TYPICAL JUNCTION CAPACITANCE

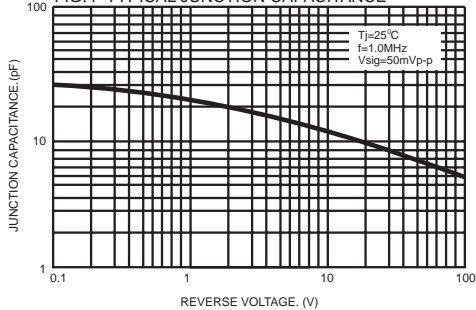
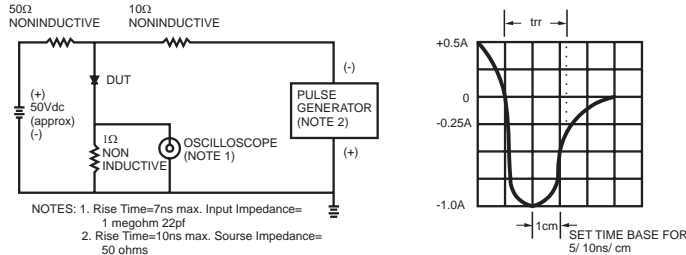


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-41	5000/AMMO	50000	42X28X31	14.00	12.00

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Diodes - General Purpose, Power, Switching category](#):

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

Other Similar products are found below :

[MCL4151-TR3](#) [MMBD3004S-13-F](#) [RD0306T-H](#) [1N3611](#) [NTE156A](#) [NTE574](#) [NTE6244](#) [1SS193,LF](#) [1SS400CST2RA](#) [SDAA13](#)
[SHN2D02FUTW1T1G](#) [LS4151GS08](#) [1N4449](#) [1N456A](#) [1N4934-E3/73](#) [1N914BTR](#) [RFUH20TB3S](#) [D291S45T](#) [BAV300-TR](#) [BAW56DWQ-](#)
[7-F](#) [BAW75-TAP](#) [MM230L-CAA](#) [IDW40E65D1](#) [JAN1N3600](#) [JAN1N4454UR-1](#) [LL4151-GS18](#) [SMMSD4148T3G](#) [BYW95B/A52A](#)
[NSVDAN222T1G](#) [CDSZC01100-HF](#) [LL4150-M-08](#) [1N4454-TR](#) [BAV70HDW-7](#) [BAS28-7](#) [JANTX1N6640](#) [BAW56HDW-13](#) [BAS28 TR](#)
[VS-HFA04SD60STR-M3](#) [NSVM1MA152WKT1G](#) [1SS388-TP](#) [RGP30D-E3/73](#) [VS-8EWF02S-M3](#) [BAV99TQ-13-F](#) [BAV99HDW-13](#)
[MMDB30-E28X](#) [IDP20C65D2XKSA1](#) [LS4148](#) [IDV15E65D2](#) [NSVM1MA152WAT1G](#) [HN4D02JU\(TE85L,F\)](#)