RP1H

High Efficiency Rectifier

RoHS COMPLIANT

VOLTAGE RANGE: 2000 V
CURRENT: 0.1 A

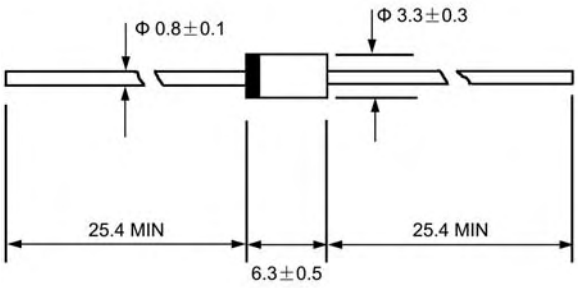
DO - 15

Features

- ◇ Diffused junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High crrent capability
- ◇ Easily cleaned with freon, alcohol, Isopropand and similar solvents

Mechanical Data

- ◇ Case: JEDEC DO-15, molded plastic
- ◇ Terminals: Axial leads,solderable per MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.014 ounces, 0.39 grams
- ◇ Mounting: Any



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase,half wave,50Hz,resistive or inductive load. For capacitive load,derate by 20%.

		RP1H	UNITS
Maximum peak repetitive reverse voltage	V_{RRM}	2000	V
Maximum RMS voltage	V_{RMS}	1400	V
Maximum DC blocking voltage	V_{DC}	2000	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	0.1	A
Peak forw ard surge current 10ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	5.0	V
Maximum instantaneous forw ard voltage @ 0.1A	V_F	7.0	V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	20.0 200.0	μA
Maximum reverse recovery time (Note1)	t_{rr}	50	ns
Typical junction capacitance (Note2)	C_J	20	pF
Typical thermal resistance (Note3)	$R_{\theta JL}$	15	℃/W
Operating junction temperature range	T_J	- 55 ----- + 150	℃
Storage temperature range	T_{STG}	- 55 ----- + 150	℃

NOTE: 1.Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.

2. Measured at 1.0MH_Z and applied rev erse v oltage of 4.0V DC.

3.Thermal resistance junction to ambient .

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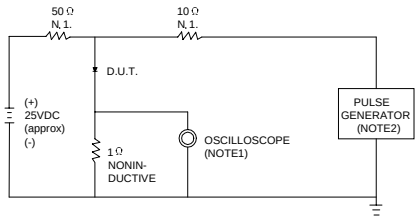
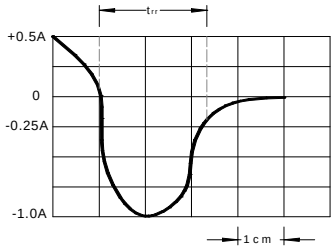
Ratings AND Charactieristic Curves

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





NOTES:1.RISE TIME = 7ns MAX.INPUT IMPEDANCE =1MΩ. 22pF.
2.RISE TIME =10ns MAX.SOURCE IMPEDANCE=50 Ω.

SET TIME BASE FOR 10/20 ns/cm

FIG.2 -- TYPICAL FORWARD CHARACTERISTIC

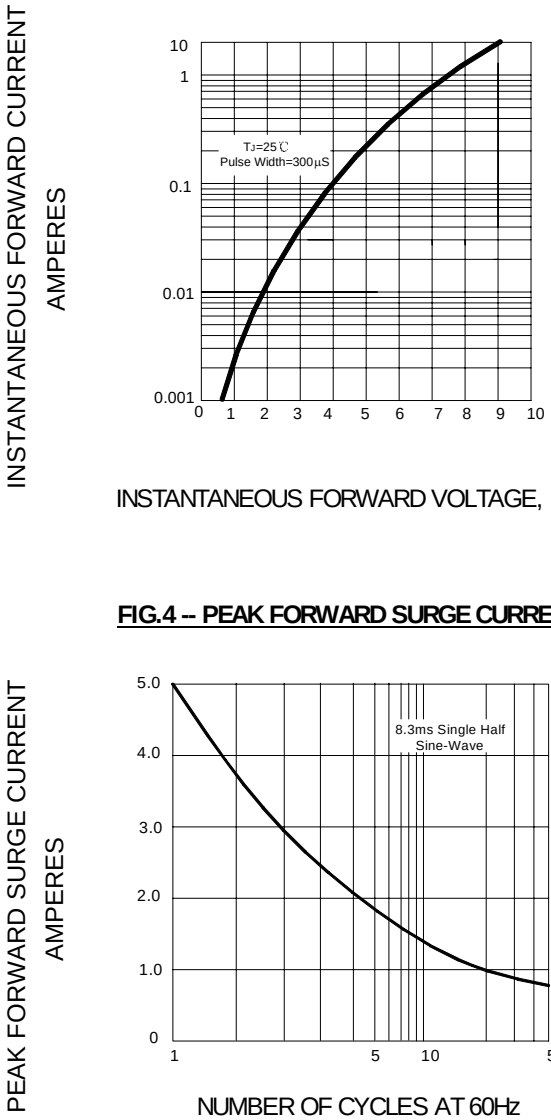


FIG.3 -- FORWARD DERATING CURVE

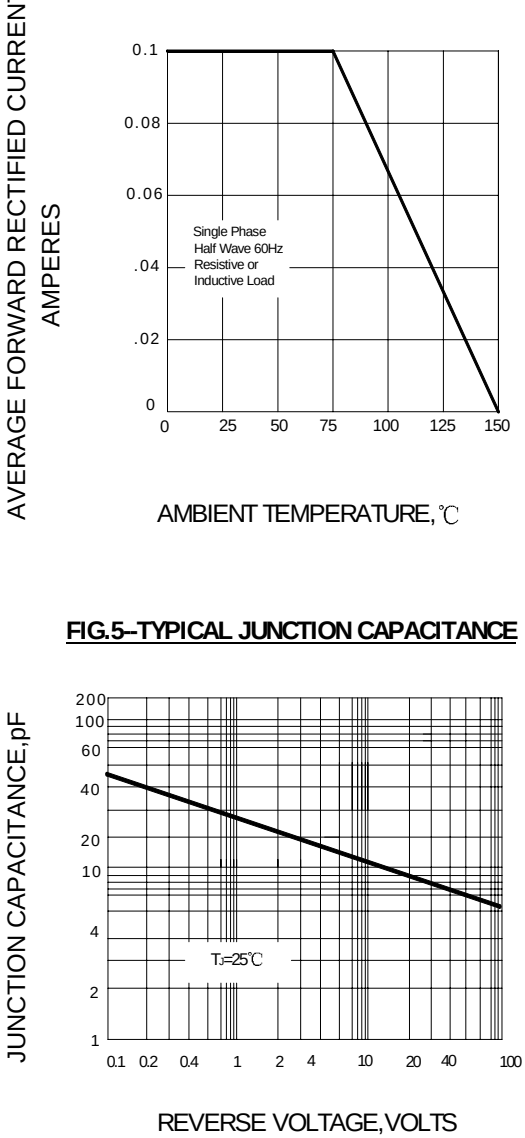


FIG.4 -- PEAK FORWARD SURGE CURRENT

FIG.5--TYPICAL JUNCTION CAPACITANCE

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-15	3000/AMMO	30000	42X28X31	12.00	10.00