RH2500A - RH5000A

SURFACE MOUNT FAST RECOVER HIGH VOLTAGE DIODES

VOLTAGE RANGE: 2500 - 5000 V
CURRENT: 0.2 A

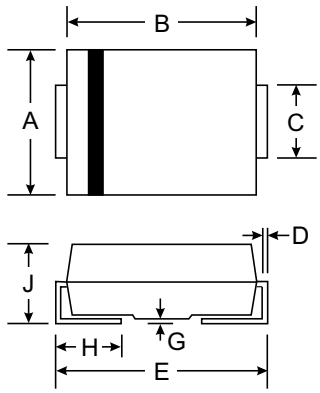
Features

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with alcohol,Isopropanol and similar solvents

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)

RoHS COMPLIANT



SMA(DO-214AC)		
Dim	**Min**	**Max**
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

T_A = 25°C unless otherwise specified

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

Characteristic	Symbol	RH2500A	RH3000A	RH4000A	RH5000A	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	2500	3000	4000	5000	V
Maximum RMS voltage	V_{RMS}	1750	2100	2800	3500	V
Maximum DC blocking voltage	V_{DC}	2500	3000	4000	5000	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	0.2				A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	30.0				A
Maximum instantaneous forw ard voltage @ 0.2A	V_F	4.0	5.0	6.5		V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	5.0 100.0				μA
Maximum reverse recovery time (Note1)	t_{rr}	500				ns
Typical junction capacitance (Note2)	C_J	15				pF
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 reverse voltage of 4.0V DC.

RATINGS AND CHARACTERISTIC CURVES RH2500A -RH5000A

FIG.1 -- FORWARD DERATING CURVE

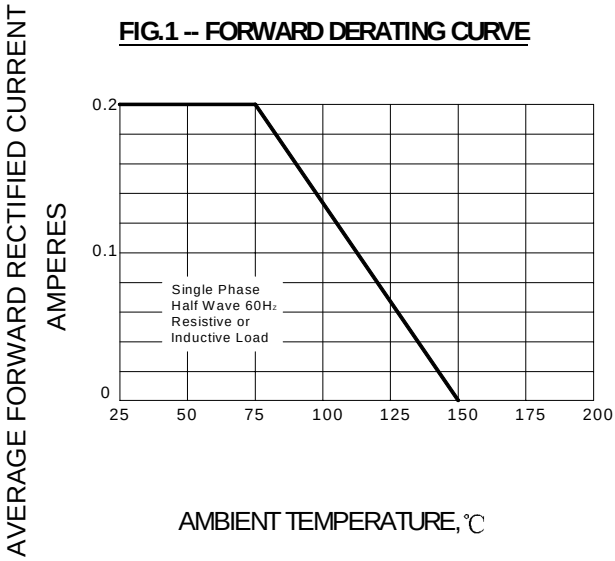


FIG.2 -- PEAK FORWARD SURGE CURRENT

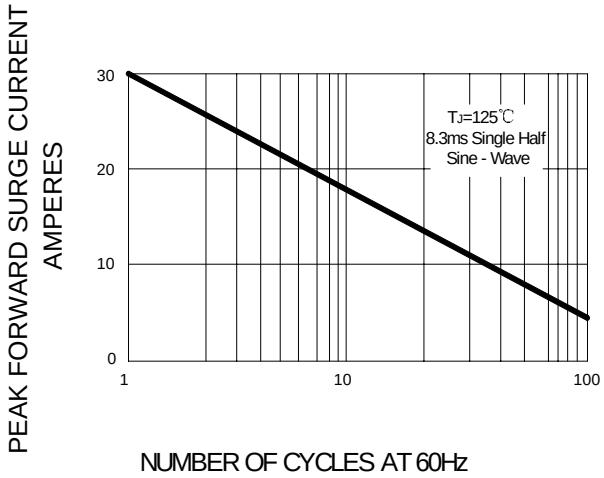
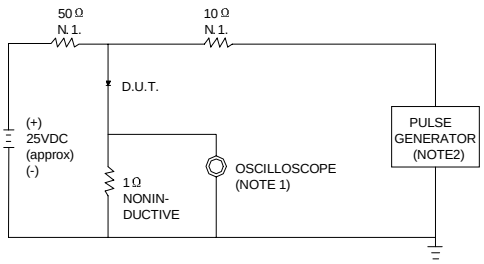
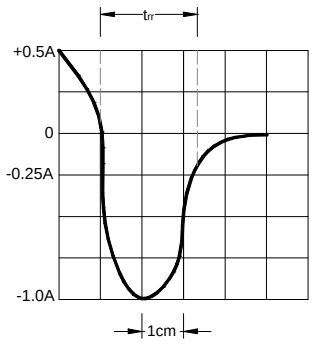


FIG.3 -- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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



SET TIME BASE FOR 50/100 ns/cm