

SURFACE MOUNT RECTIFIERS

VOLTAGE RANGE: 50 --- 400 V
CURRENT: 3.0 A

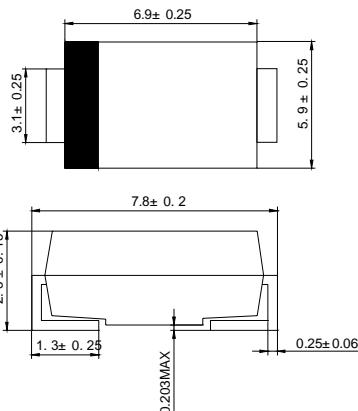
FEATURES

- ◇ Low cost
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- ◇ Case: JEDEC DO-214AB, molded plastic
- ◇ Terminals: Solderable per MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.007 ounces, 0.21 grams
- ◇ Mounting position: Any

DO-214AB(SMC)



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

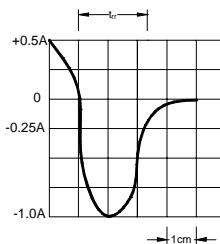
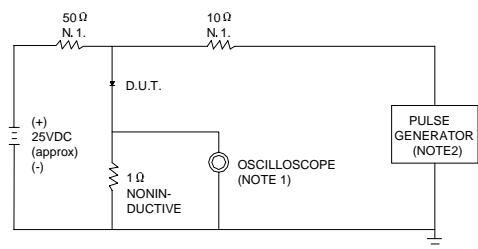
Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		ES3A	ES3B	ES3C	ES3D	ES3G	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	150	200	400	V
Maximum RMS voltage	V _{RMS}	35	70	105	140	280	V
Maximum DC blocking voltage	V _{DC}	50	100	150	200	400	V
Maximum average forward rectified current @T _A =100°C	I _{F(AV)}			3.0			A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @T _J =125°C	I _{FSM}			100			A
Maximum instantaneous forward voltage at 3.0 A	V _F			0.95	1.25		V
Maximum reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R			10	500		µA
Typical reverse recovery time (Note1)	t _{rr}			35			ns
Typical junction capacitance (Note2)	C _J			45			pF
Typical thermal resistance (Note3)	R _{θJA}			25			°C/W
Operating junction temperature range	T _J			- 55 ---- + 150			°C
Storage temperature range	T _{STG}			- 55 ---- + 150			°C

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

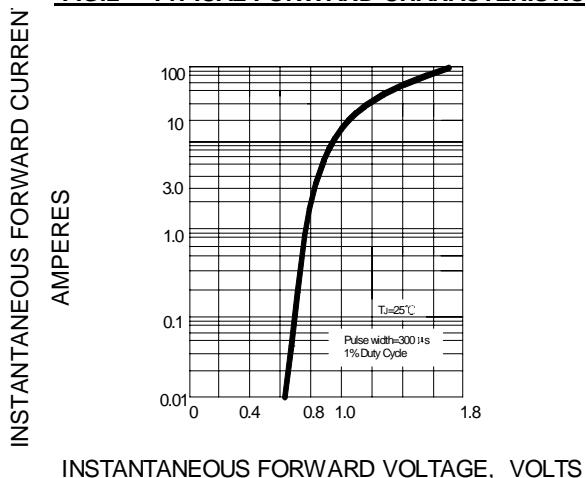
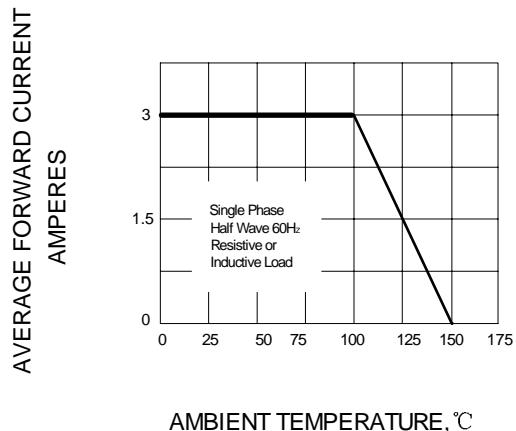
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient and junction to lead P.C.B. mounted on 0.27"X0.27"(7.0X7.0mm²) copper pad areas

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 10/15 ns/cm

FIG.2 -- TYPICAL FORWARD CHARACTERISTIC**FIG.3 -- FORWARD DERATING CURVE****FIG.4 -- TYPICAL JUNCTION CAPACITANCE**