



Features:

- Low Cost
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- Easily Cleaned With Alcohol, Isopropanol And Similar Solvents

Mechanical Data:

- Case : JEDEC DO-214AA, molded plastic
- Terminals : Solderable per MIL- STD-202, Method 208
- Polarity : Colour band denotes cathode
- Weight : 0.003oz, 0.093g
- Mounting position : Any

Maximum Ratings and Electrical Characteristics:

Ratings at 25°C ambient temperature unless otherwise specified.

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

Characteristics	Symbol	ES2G-13-F	Units
Maximum recurrent peak reverse voltage	V_{RRM}	400	V
Maximum RMS voltage	V_{RMS}	210	V
Maximum DC blocking voltage	V_{DC}	400	V
Maximum average forward rectified current at $T_A=110^{\circ}C$	$I_{F(AV)}$	2	A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load at $T_J=125^{\circ}C$	I_{FSM}	50	A
Maximum instantaneous forward voltage at 2A	V_F	1.25	V
Maximum reverse current at $T_A=25^{\circ}C$ at rated DC blocking voltage at $T_A=125^{\circ}C$	I_R	10 350	μA
Typical reverse recovery time (Note 1)	t_{rr}	35	nS
Typical junction capacitance (Note 2)	C_j	18	pF
Typical thermal resistance (Note 3)	$R_{\theta JA}$	40	$^{\circ}C/W$
Operating / Storage junction temperature range	T_J, T_{STG}	-55 to +150	$^{\circ}C$

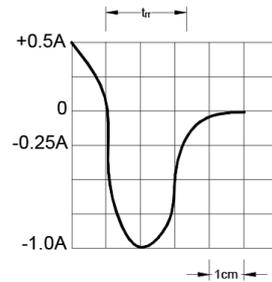
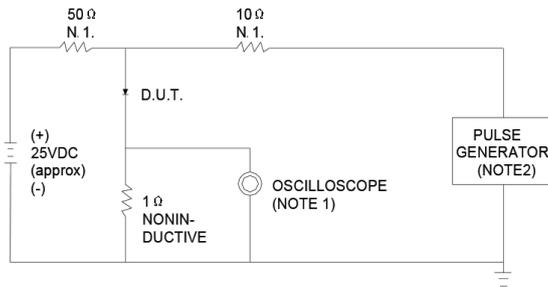
Note:

(1) Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.

(2) Measured at 1MHz and applied reverse voltage of 4V DC.

(3) Thermal resistance from junction to ambient and junction to lead PCB mounted on 0.27" x 0.27" (7 x 7mm²) 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

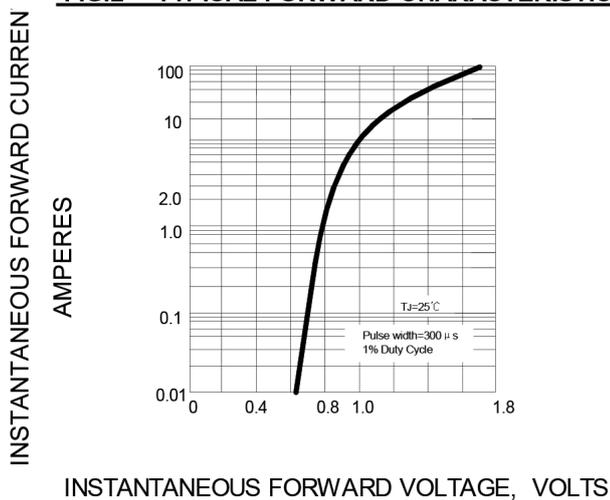


FIG.3 -- FORWARD DERATING CURVE

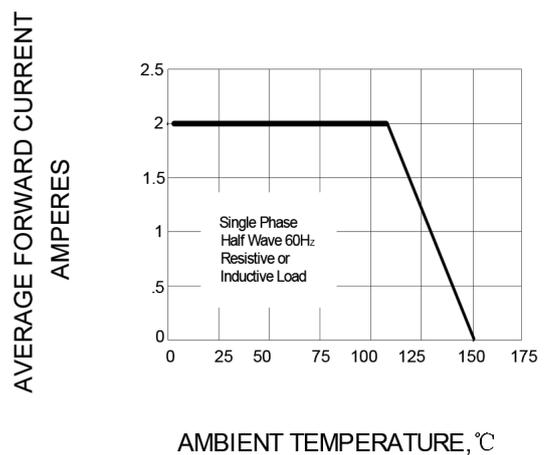


FIG.4 -- TYPICAL JUNCTION CAPACITANCE

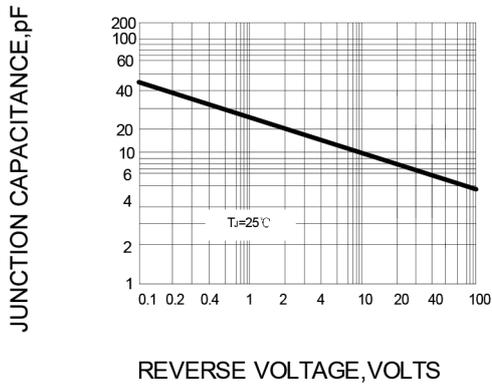
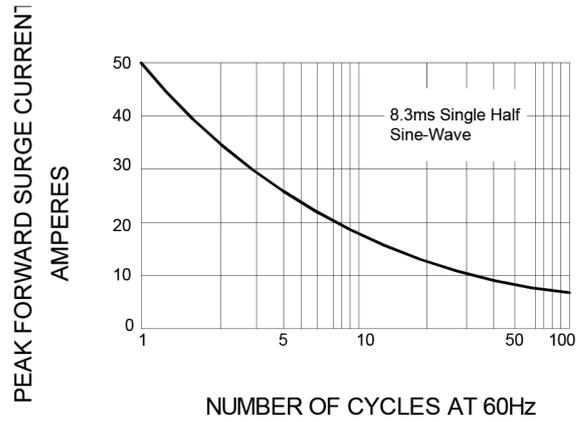
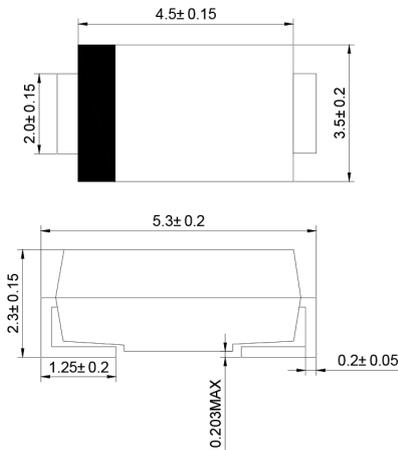


FIG.5 -- PEAK FORWARD SURGE CURRENT



Dimensions:

DO-214AA(SMB)



Dimensions : Millimetres

Part Number Table

Description	Part Number
Surface Mount Rectifier	ES2G-13-F

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.