

Surface Mount Rectifier



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	MURS120-13-F	Units
Maximum recurrent peak reverse voltage	V_{RRM}	200	V
Maximum RMS voltage	V_{RMS}	140	V
Maximum DC blocking voltage	V_{DC}	200	V
Maximum average forward at $T_L=150^\circ\text{C}$ Rectified current at $T_A=125^\circ\text{C}$	$I_{F(AV)}$	1 2	A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load at $T_J=125^\circ\text{C}$	I_{FSM}	40	A
Typical reverse recovery time (Note 1)	t_{rr}	25	ns
Maximum reverse current at $T_A=25^\circ\text{C}$ at rated DC blocking voltage at $T_A=125^\circ\text{C}$	I_R	2 50	μA
Maximum instantaneous forward at $T_J=25^\circ\text{C}$ Voltage at 1A at $T_J=150^\circ\text{C}$	V_F	0.875 0.71	V
Typical thermal resistance (Note 2)	$R_{\theta JA}$	13	$^\circ\text{C/W}$
Operating / Storage junction temperature range	T_J, T_{STG}	-65 to +175	$^\circ\text{C}$

Note:

- (1) Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$.
(2) Junction to ambient.

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

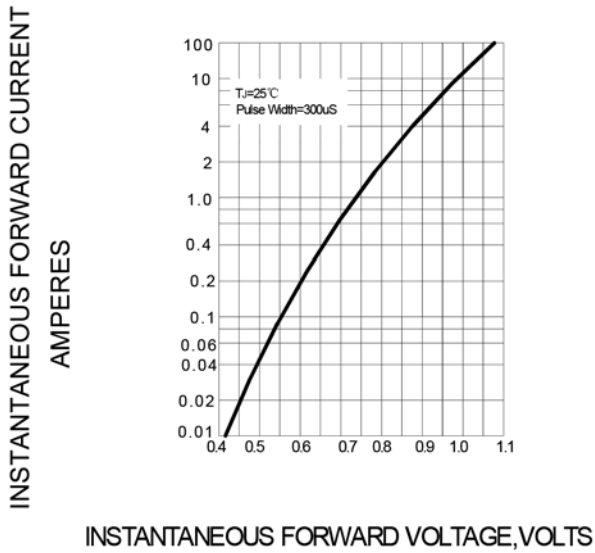


FIG.2 -- TYPICAL REVERSE LEAKAGE CHARACTERISTICS

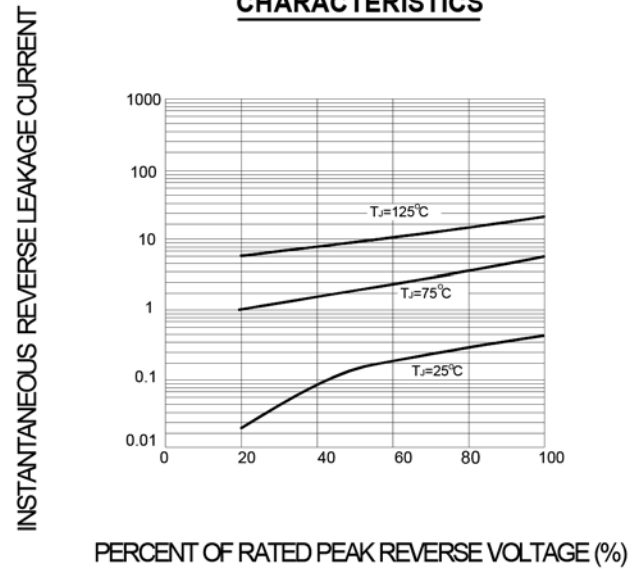


FIG.3 – PEAK FORWARD SURGE CURRENT

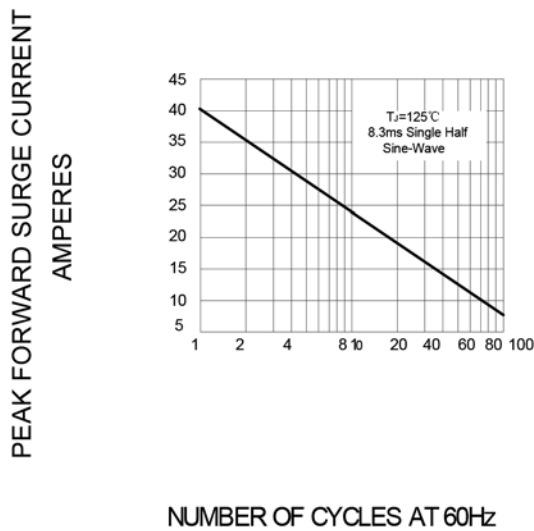
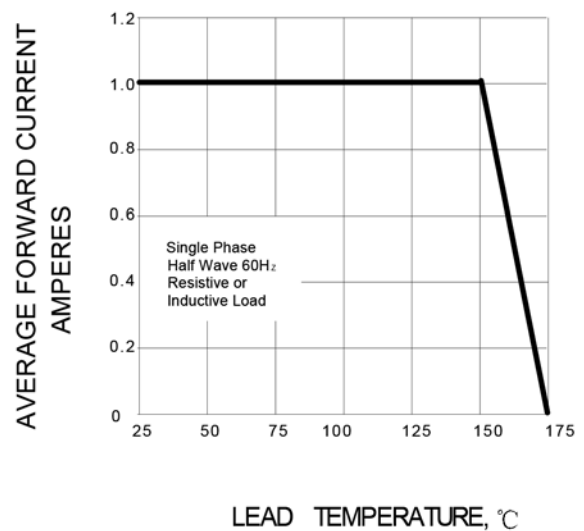


FIG.4 – FORWARD DERATING CURVE

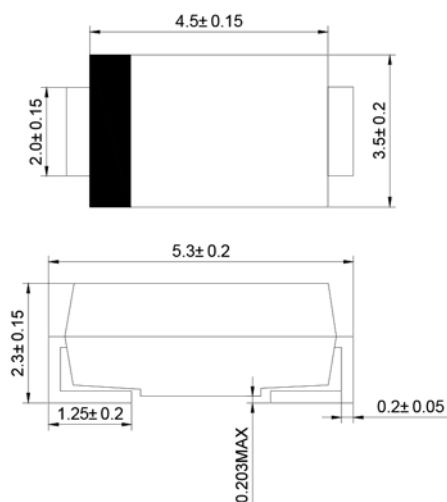


Surface Mount Rectifier



Dimensions:

DO-214AA(SMB)



Dimensions : Millimetres

Part Number Table

Description	Part Number
Surface Mount Rectifier	MURS120-13-F

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