MURS120

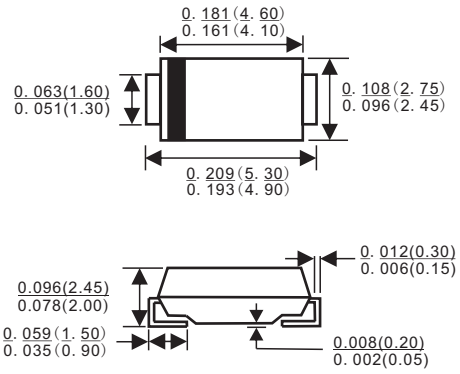
Surface Mount Rectifiers

RoHS COMPLIANT

VOLTAGE RANGE: 200 V
CURRENT: 1.0 A



SMA/DO-214AC



Dimensions in inches and(millimeters)

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-214AA,molded plastic
- ✧ Polarity: Color band denotes cathode
- ✧ Weight: 0.064 gram
- ✧ Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

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

		MURS120	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 forw ard @T_L=150 ℃ rectified current @T_L=145 ℃	$I_{F(AV)}$	1.0 2.0	A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	40.0	A
Typical reverse recovery time (Note1)	t_{rr}	25	ns
Maximum reverse current @T_A=25 ℃ at rated DC blocking voltage @T_A=150 ℃	I_R	2.0 50.0	μA
Maximum instantaneous forw ard @T_J=25 ℃ voltage at 1.0 A @T_J=150 ℃	V_F	0.875 0.71	V
Typical thermal resistance (Note2)	$R_{\theta JL}$	13.0	℃/W
Operating junction temperature range	T_J	- 65 ---- + 175	℃
Storage temperature range	T_{STG}	- 65 ---- + 175	℃

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

2. Junction to ambient.

Ratings AND Charactieristic Curves

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

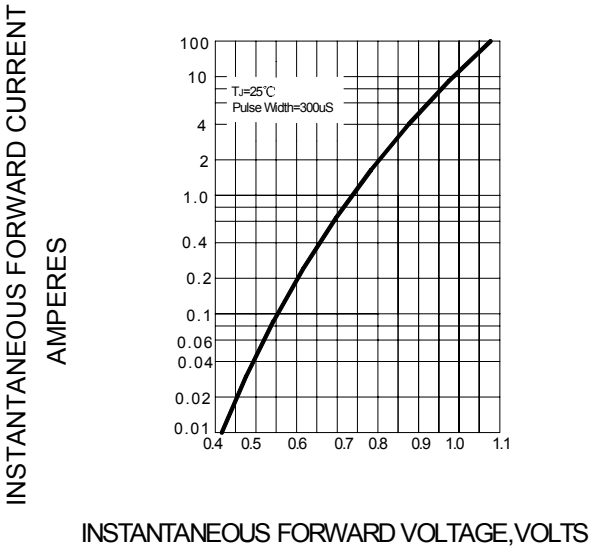


FIG.2 -- TYPICAL REVERSE LEAKAGE CHARACTERISTICS

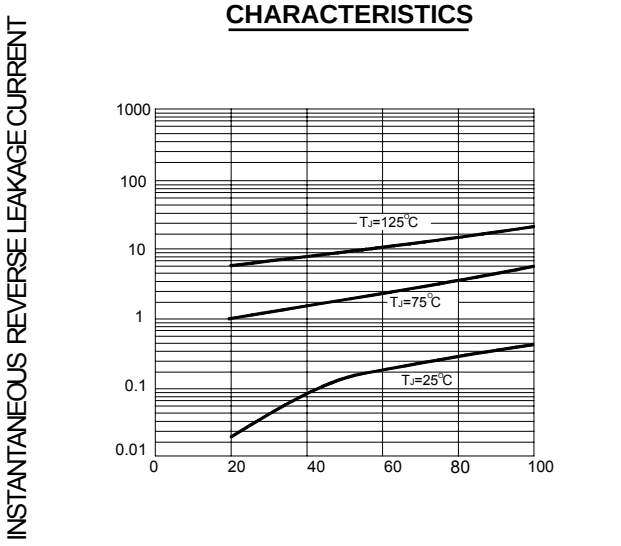


FIG.3 -- PEAK FORWARD SURGE CURRENT

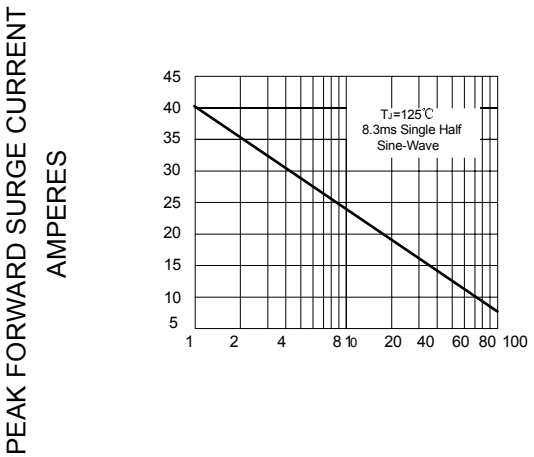
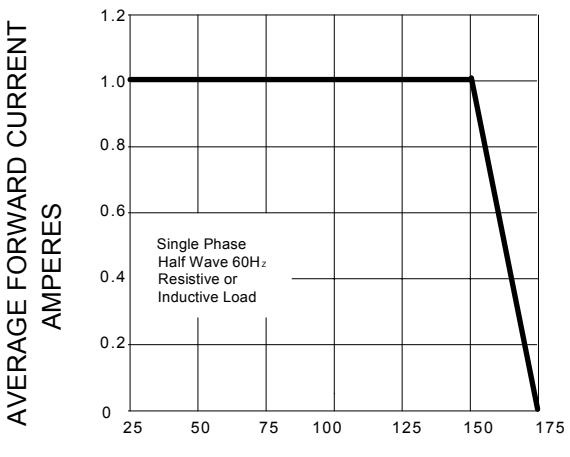


FIG.4 -- FORWARD DERATING CURVE



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMA	5000/REEL	80000	36X30.6X31	12.00	11.00