

SURFACE MOUNT RECTIFIERS

VOLTAGE RANGE: 400 --- 600 V
CURRENT: 1.0 A

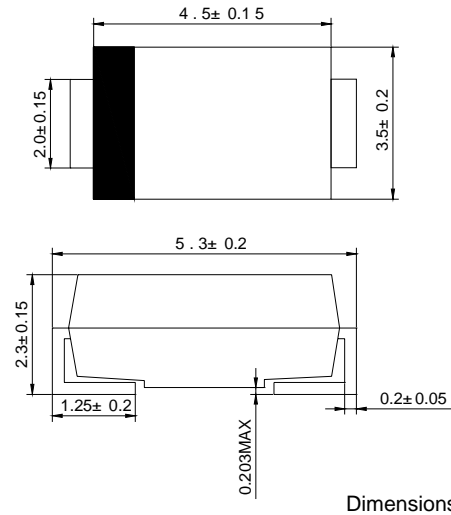
FEATURES

- ◇ 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-214AA, molded plastic
- ◇ Terminals: Solderable per MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.003 ounces, 0.093 grams
- ◇ Mounting position: Any

DO-214AA(SMB)



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%.

		MURS140	MURS160	UNITS
Device marking code		MG	MJ	
Maximum recurrent peak reverse voltage	V_{RRM}	400	600	V
Maximum RMS voltage	V_{RMS}	280	420	V
Maximum DC blocking voltage	V_{DC}	400	600	V
Maximum average forward rectified current @ $T_L = 110^\circ\text{C}$	$I_{F(AV)}$	1.0		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J = 125^\circ\text{C}$	I_{FSM}	35		A
Typical reverse recovery time (Note1)	t_{rr}	50		ns
Maximum reverse current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 125^\circ\text{C}$	I_R	5.0 150		μA
Maximum instantaneous forward voltage at 1.0 A	V_F	1.25		V
Typical thermal resistance (Note2)	$R_{\theta JL}$	13		$^\circ\text{C/W}$
Operating junction temperature range	T_J	- 55 ---- + 150		$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 ---- + 150		$^\circ\text{C}$

NOTE: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $t_{rr} = 0.25\text{A}$.

2. Junction to ambient.

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

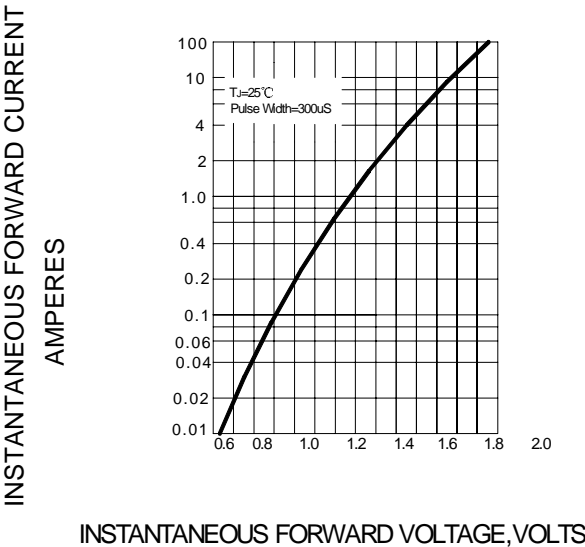


FIG.2 -- TYPICAL REVERSE LEAKAGE CHARACTERISTICS

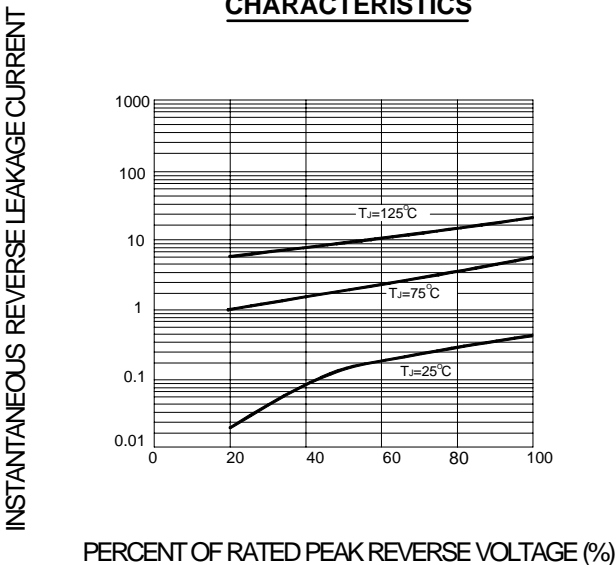


FIG.3 – PEAK FORWARD SURGE CURRENT

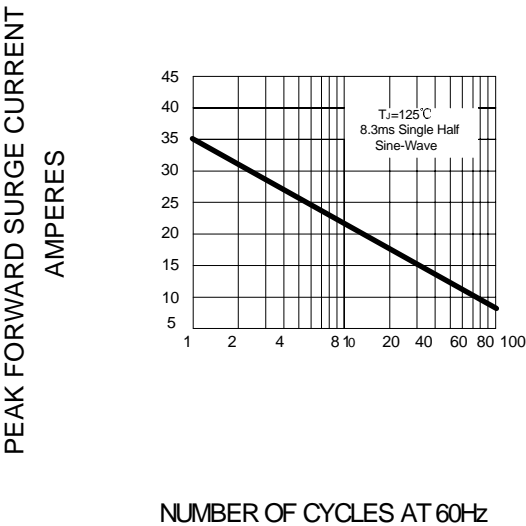


FIG.4 – FORWARD DERATING CURVE

