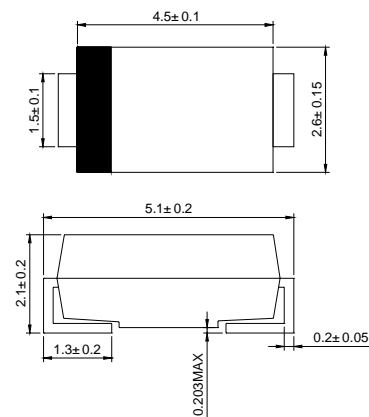


SURFACE MOUNT RECTIFIERS

FEATURES

- For surface mounted applications
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Alcohol, Isopropnol and similar solvents
- The plastic material carries U/L recognition 94V-0

DO-214AC(SMA)



Dimensions in millimeters

MECHANICAL DATA

- Case: JEDEC DO-214AC, molded plastic
- Terminals: Solder plated, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode end
- Weight: 0.002 ounces, 0.064 grams
- Mounting position: Any

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%.

Parameter		M1	M2	M3	M4	M5	M6	M7	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @ $T_L=110^\circ\text{C}$	$I_{(AV)}$	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}	30							A
Maximum instantaneous forward voltage at 1.0 A	V_F	1.1							V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R	5.0 50							μA
Typical junction capacitance (Note1)	C_J	15							pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	75							$^\circ\text{C/W}$
Operating temperature range	T_J	- 55 --- + 150							$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 --- + 150							$^\circ\text{C}$

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient

FIG.1 – FORWARD DERATING CURVE

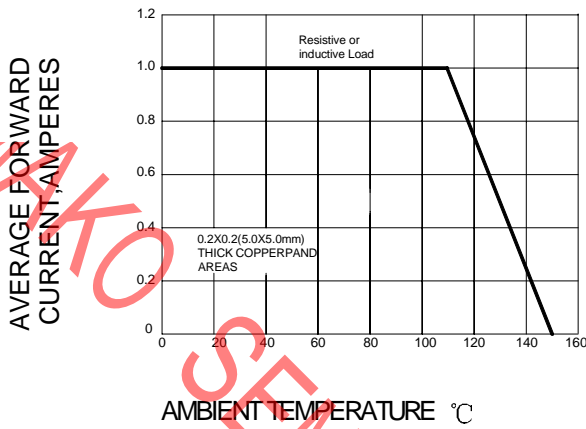


FIG.2 PEAK FORWARD SURGE CURRENT

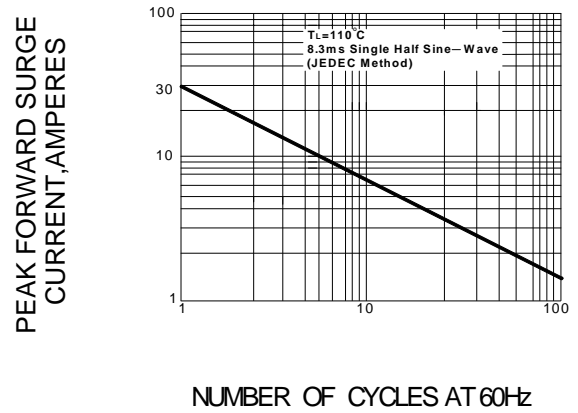


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

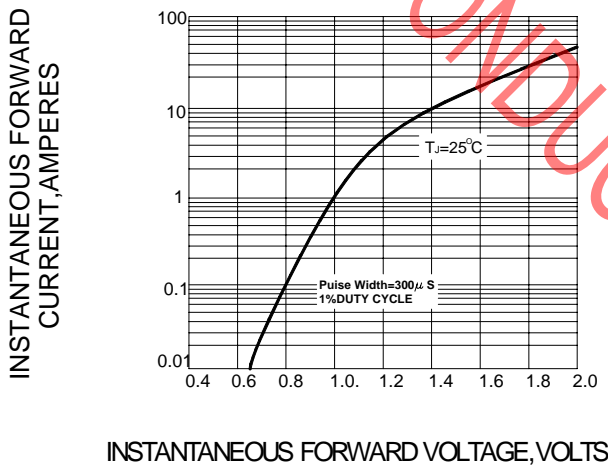


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

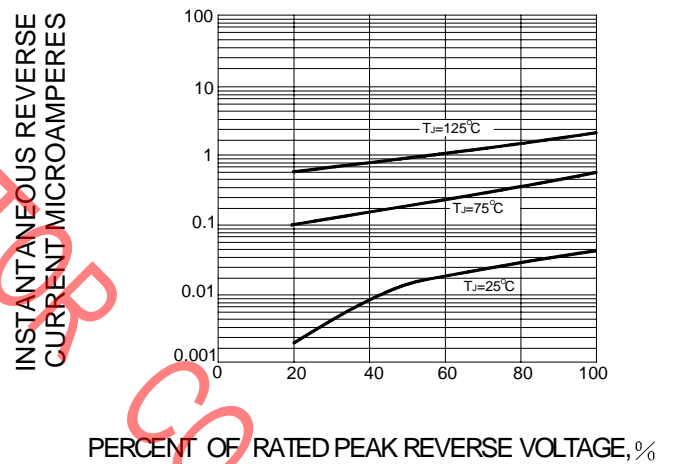


FIG.5-TYPICAL JUNCTION CAPACITANCE

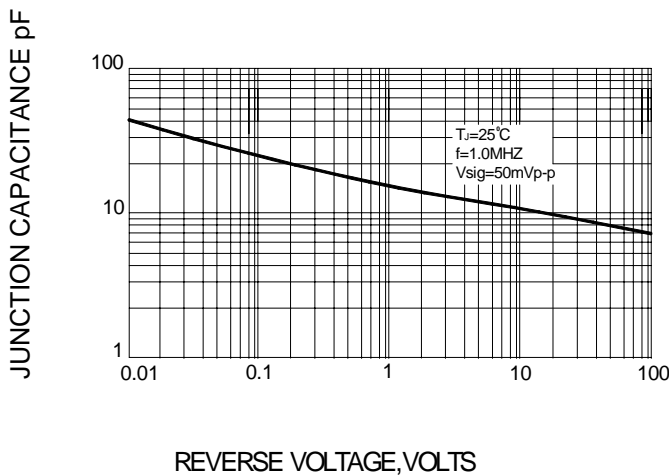


FIG.6-TRANSIENT THERMAL IMPEDANCE

