

## FEATURES

The plastic package carries Underwriters Laboratory  
 Flammability Classification 94V-0  
 For surface mounted applications  
 Super fast switching for high efficiency  
 Low reverse leakage  
 Built-in strain relief, ideal for automated placement  
 High forward surge current capability  
 High temperature soldering guaranteed:  
 260 °C/10 seconds at terminals

## MECHANICAL DATA

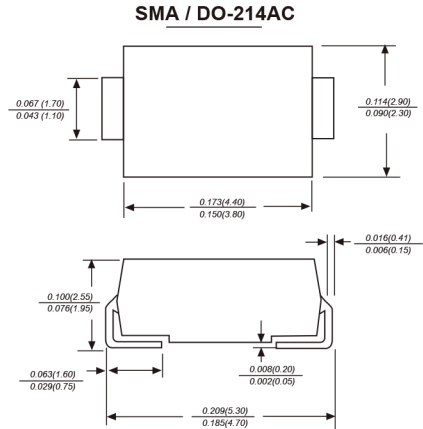
**Case:** JEDEC DO-214AC molded plastic body

**Terminals:** Solder plated, solderable per MIL-STD-750,  
 Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.002 ounce, 0.07 grams



Dimensions in inches and (millimeters)

## 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 current derate by 20%.

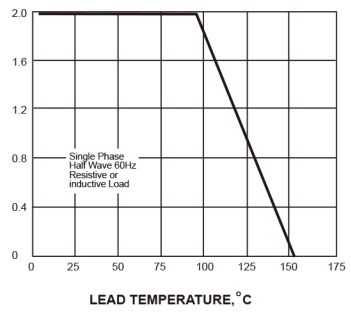
	SYMBOLS	ES2M	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	1000	V
Maximum RMS voltage	$V_{RMS}$	700	V
Maximum DC blocking voltage	$V_{DC}$	1000	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{(AV)}$	2.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50.0	A
Maximum instantaneous forward voltage at 2.0A	$V_F$	1.7	V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$	5.0 50.0	$\mu\text{A}$
Maximum reverse recovery time	$t_{rr}$	75	ns
Typical junction capacitance	$C_J$	20.0	pF
Typical thermal resistance	$R_{\theta JA}$	65.0	$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

**Note:** 1. Reverse recovery condition  $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

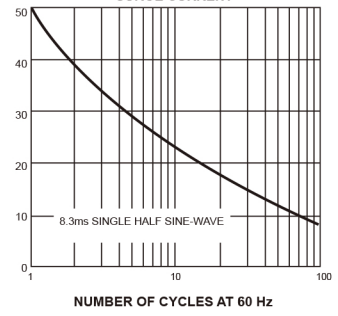
AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



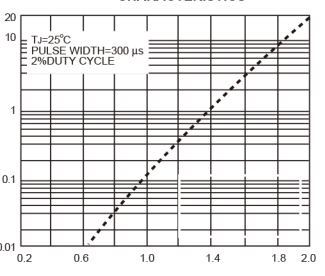
PEAK FORWARD SURGE CURRENT,  
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



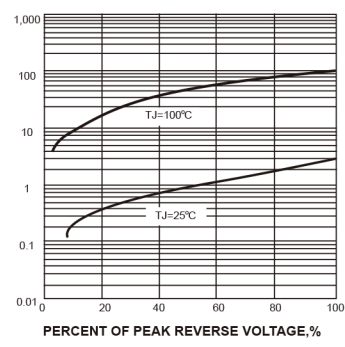
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



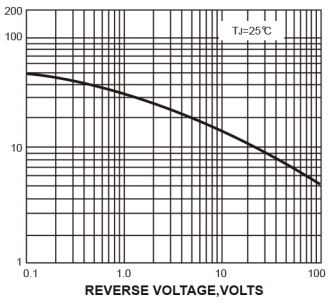
INSTANTANEOUS REVERSE CURRENT,  
MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE,  
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

