

**Features**

- The plastic package carries UL Flammability Classification 94V-0
- For surface mounted applications
- 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 Characteristics**

- Case: SMB(DO-214AA) package molded plastic body over passivated chip
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any

**Electrical Parameters**

PARAMETER	SYMBOL	US3AB	US3BB	US3DB	US3GB	US3JB	US3KB	US3MB	UNIT	
Maximum repetitive 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	$I_{AV}$	3							A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	100							A	
Maximum instantaneous forward voltage at 3A	$V_F$	1		1.4		1.7		V		
Maximum DC reverse current at rated DC blocking voltage	$T_A=25\text{ }^\circ\text{C}$	$I_R$							5	uA
	$T_A=100\text{ }^\circ\text{C}$	$I_{RT}$							50	uA
Maximum reverse recovery time <sup>(NOTE 1)</sup>	$t_{rr}$	50				75			ns	
Typical junction capacitance <sup>(NOTE 2)</sup>	$C_J$	45							pF	
Typical Thermal Resistance Junction to Ambient <sup>(NOTE3)</sup>	$R_{\theta JA}$	65							°C/W	
Typical Thermal Resistance Junction to Lead <sup>(NOTE3)</sup>	$R_{\theta JL}$	20							°C/W	
Operating Temperature Range	$T_J$	-55 to 150							°C	
Storage Temperature Range	$T_{STG}$	-55 to 150							°C	

Note1: Reverse recovery condition  $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

Note2: Measured at 1MHz and applied reverse voltage of 4.0V DC.

Note3: PCB. mounted with 7×7mm copper pad areas

Rating And Characteristic Curves (TA=25°C unless otherwise noted)

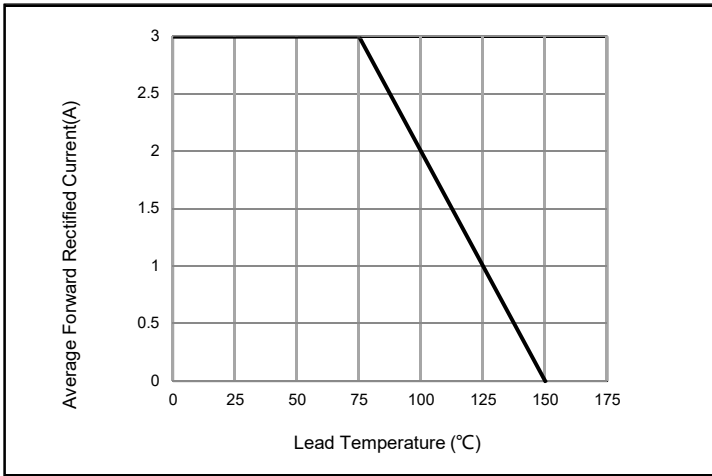


Fig. 1 - Forward Current Derating Curve

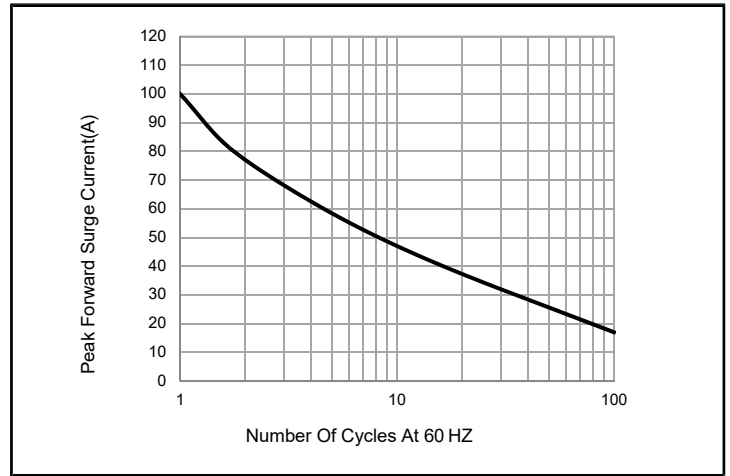


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

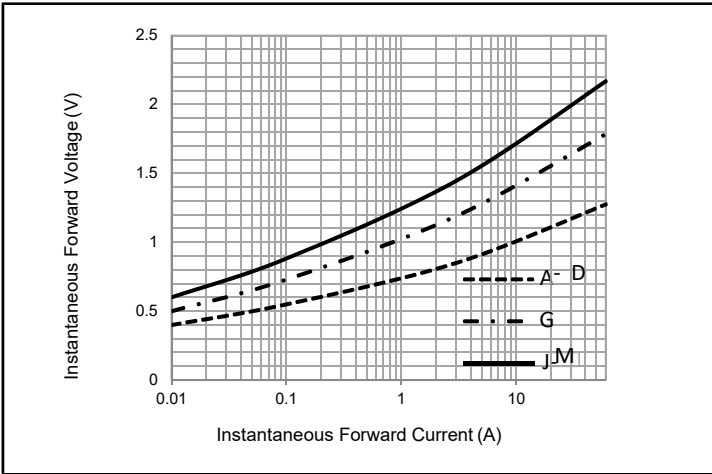


Fig. 3 - Typical Instantaneous Forward Characteristics

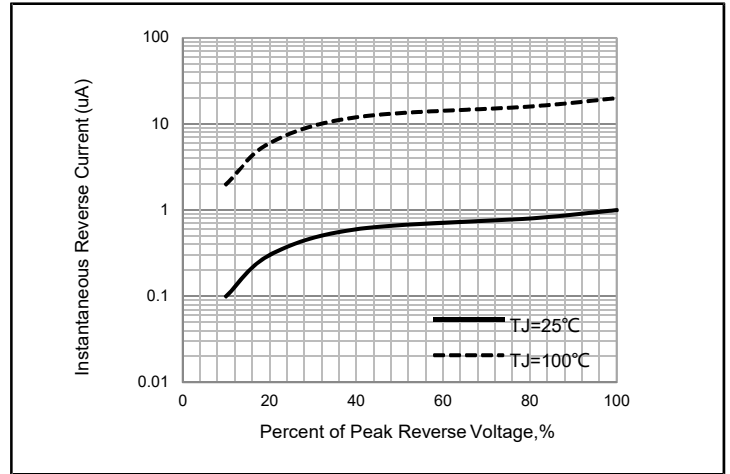


Fig. 4 - Typical Reverse Characteristics

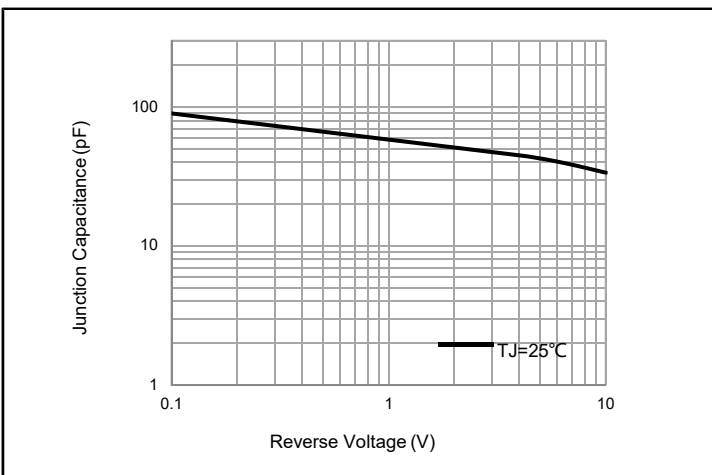


Fig. 5 - Typical Junction Capacitance

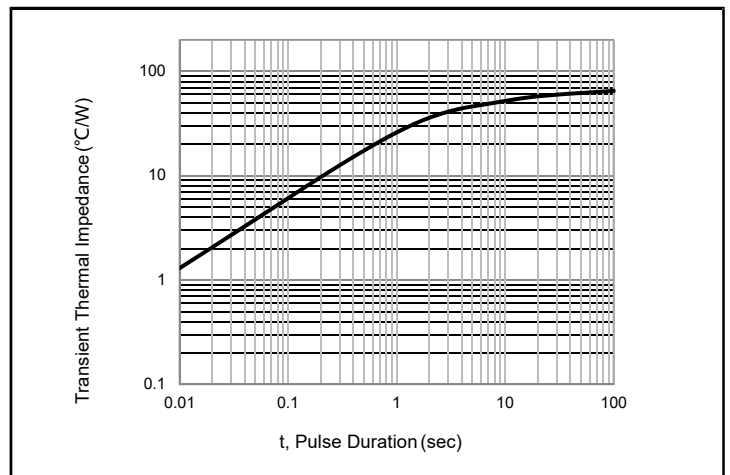
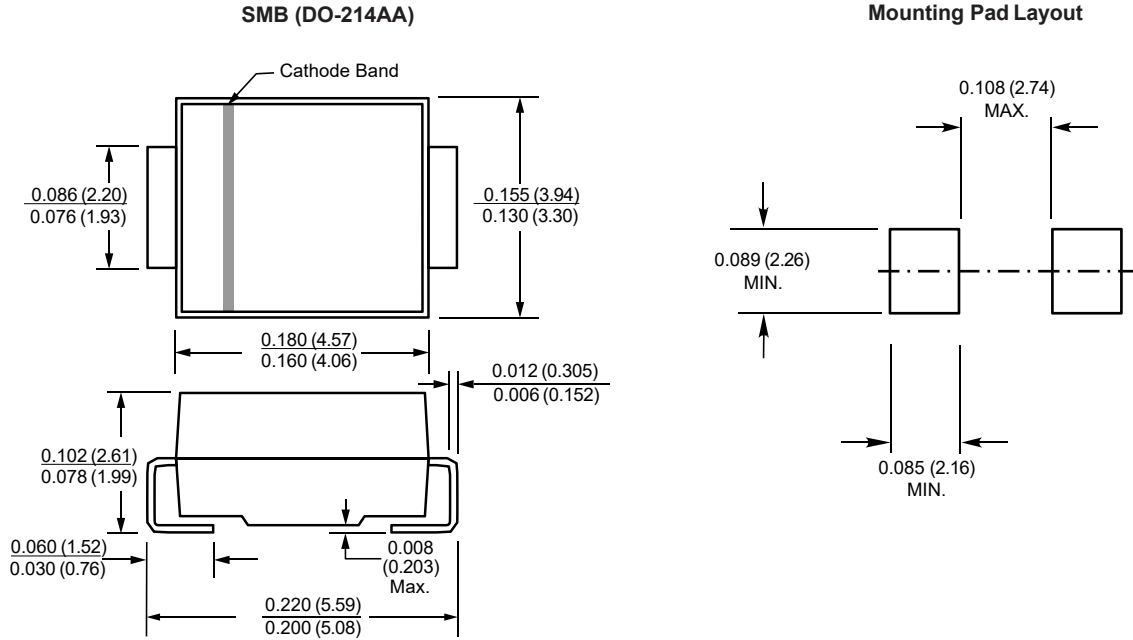


Fig. 6 - Typical Transient Thermal Impedance

**Package Outline Dimensions in inches (millimeters)**

CASE:0201



**Part Marking System**



PDW:Company Logo

XX:Marking Code

**Summary of Packing Options**

Package	Packing Description	Packing Quantity
SMB	Tape/Reel, 13" reel	3000