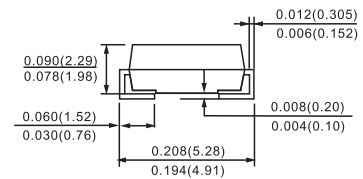
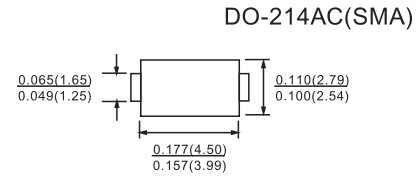


**FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature metallurgically bonded construction
- Capable of meeting environmental standards of MIL-S-19500
- For use in high frequency rectifier circuits
- Fast switching for high efficiency
- Glass passivated cavity-free junction
- 1.0 Ampere operation at  $T_A=75^{\circ}\text{C}$  with no thermal runaway
- Typical  $I_R$  less than 0.1mA

**MECHANICAL DATA**

**Case:** JEDEC DO-214AC molded plastic over glass body  
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.012 ounce, 0.34 gram



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

<b>MAXIMUM RATINGS</b>								
PARAMETER	SYMBOL	1N4933	1N4934	1N4935	1N4936	1N4937	UNIT	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	V	
Maximum RMS voltage	$V_{RMS}$	35	70	145	280	420	V	
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	V	
Maximum average forward rectified current 0.375" (9.5 mm) lead length at $T_A = 75^{\circ}\text{C}$	$I_{F(AV)}$	1.0						A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	30						A
Operating junction and storage temperature range	$T_J, T_{STG}$	- 65 to + 175						$^{\circ}\text{C}$

<b>ELECTRICAL CHARACTERISTICS</b>								
PARAMETER	TEST CONDITIONS	SYMBOL	1N4933	1N4934	1N4935	1N4936	1N4937	UNIT
Maximum instantaneous forward voltage	1.0 A	$V_F$	1.2					V
Maximum DC reverse current at rated DC blocking voltage	$T_A = 25^{\circ}\text{C}$	$I_R$	5.0					$\mu\text{A}$
	$T_A = 125^{\circ}\text{C}$		100					
Maximum reverse recovery time	$I_F = 1.0\text{ A}, V_R = 30\text{ V}$	$t_{rr}$	200					ns
Typical junction capacitance	4.0 V, 1 MHz	$C_J$	15					pF

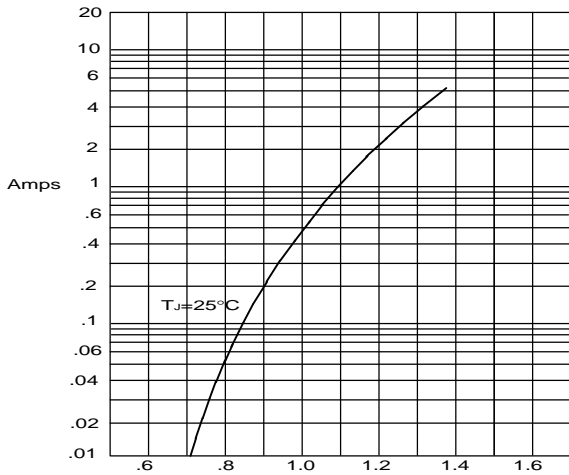
<b>THERMAL CHARACTERISTICS</b>							
PARAMETER	SYMBOL	1N4933	1N4934	1N4935	1N4936	1N4937	UNIT
Typical thermal resistance	$R_{\theta JA}^{(1)}$	55					$^{\circ}\text{C}/\text{W}$

**Note**

(1) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5 mm) lead length, PCB mounted

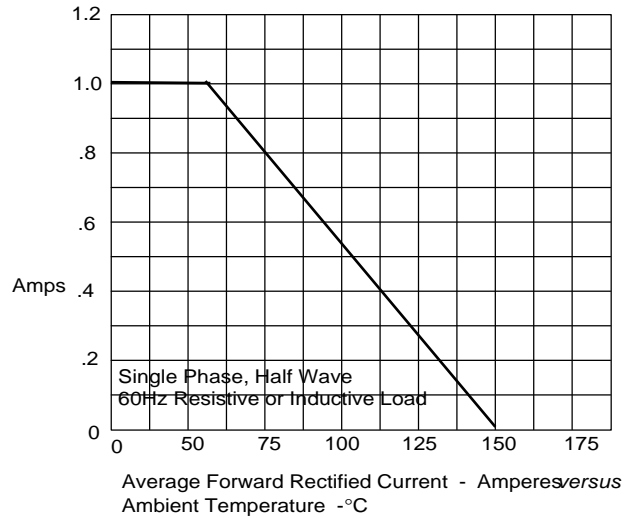
**RATINGS AND CHARACTERISTIC CURVES 1N4933 THRU 1N4937**

Figure 1 Typical Forward Characteristics



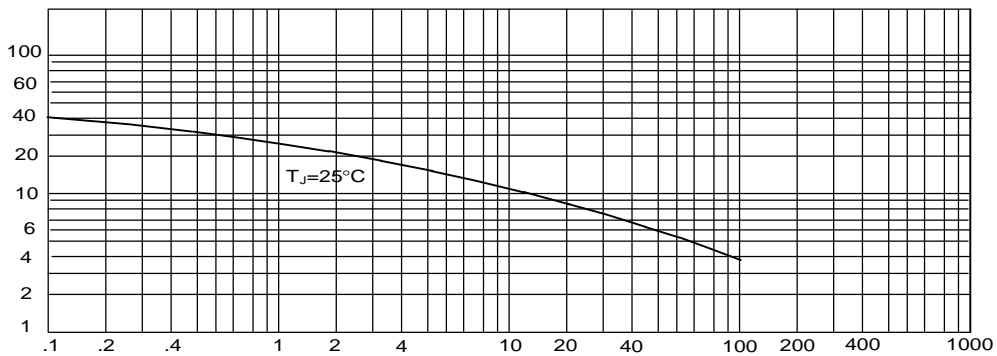
Instantaneous Forward Current - Amperes *versus*  
 Instantaneous Forward Voltage - Volts

Figure 2 Forward Derating Curve



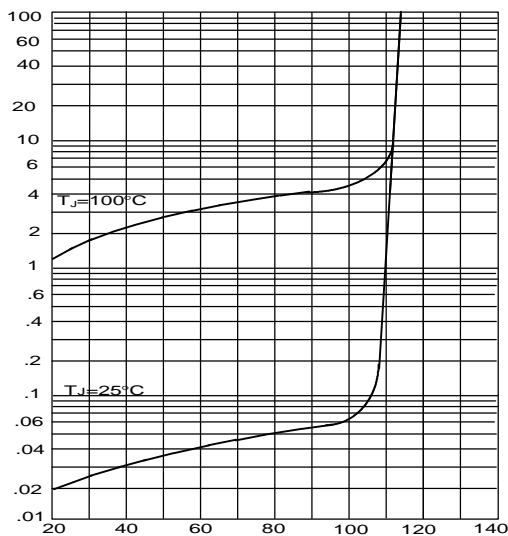
Average Forward Rectified Current - Amperes *versus*  
 Ambient Temperature - °C

Figure 3 Junction Capacitance



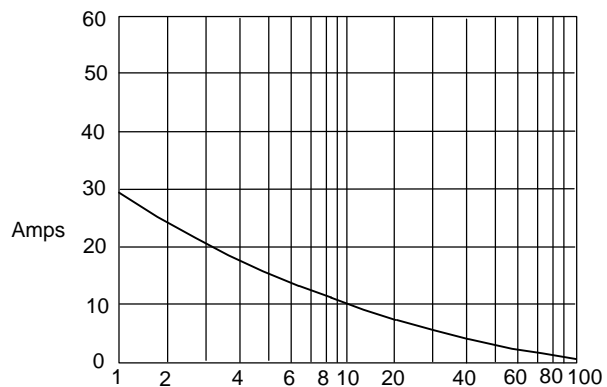
Junction Capacitance - pF *versus* Reverse Voltage - Volts

Figure 4 Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes

Figure 5 Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
 Number Of Cycles At 60Hz - Cycles