

<b>THERMAL PERFORMANCE</b>			
<b>PARAMETER</b>	<b>SYMBOL</b>	<b>TYP</b>	<b>UNIT</b>
Junction-to-ambient thermal resistance	$R_{\theta JA}$	35	$^{\circ}\text{C}/\text{W}$
Junction-to-case thermal resistance	$R_{\theta JC}$	6	$^{\circ}\text{C}/\text{W}$

<b>ELECTRICAL SPECIFICATIONS</b> ( $T_A = 25^{\circ}\text{C}$ unless otherwise noted)						
<b>PARAMETER</b>		<b>CONDITIONS</b>	<b>SYMBOL</b>	<b>TYP</b>	<b>MAX</b>	<b>UNIT</b>
Forward voltage <sup>(1)</sup>	SR502 SR503 SR504	$I_F = 5\text{A}, T_J = 25^{\circ}\text{C}$	$V_F$	-	0.55	V
	SR505 SR506			-	0.70	V
	SR509 SR510			-	0.85	V
	SR515 SR520			-	1.05	V
	SR502 SR503 SR504 SR505 SR506			$T_J = 25^{\circ}\text{C}$	-	500
Reverse current @ rated $V_R$ <sup>(2)</sup>	SR509 SR510 SR515 SR520	$T_J = 25^{\circ}\text{C}$	-	100	$\mu\text{A}$	
	SR502 SR503 SR504	$T_J = 100^{\circ}\text{C}$	-	15	mA	
	SR505 SR506		-	10	mA	
	SR509 SR510 SR515 SR520		-	-	mA	
	SR502 SR503 SR504	$T_J = 125^{\circ}\text{C}$	-	-	mA	
	SR505 SR506		-	-	mA	
	SR509 SR510		-	5	mA	
	SR515 SR520		-	1	mA	

**Notes:**

1. Pulse test with PW = 0.3ms
2. Pulse test with PW = 30ms

<b>ORDERING INFORMATION</b>		
<b>ORDERING CODE<sup>(1)(2)</sup></b>	<b>PACKAGE</b>	<b>PACKING</b>
SR5x	DO-201AD	1,250 / Tape & Reel
SR5x A0G	DO-201AD	500 / Ammo box
SR5xH	DO-201AD	1,250 / Tape & Reel
SR5xHA0G	DO-201AD	500 / Ammo box

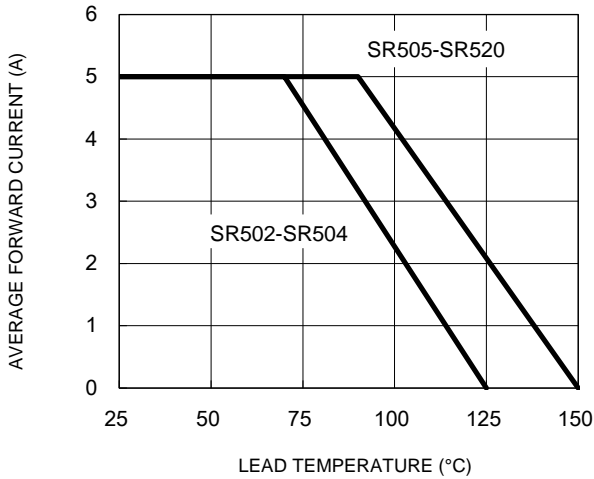
**Notes:**

1. "x" defines voltage from 20V (SR502) to 200V (SR520)
2. "H" means AEC-Q101 qualified

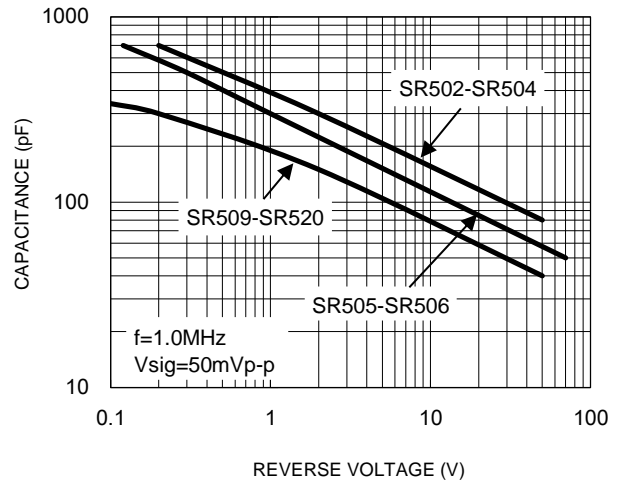
**CHARACTERISTICS CURVES**

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

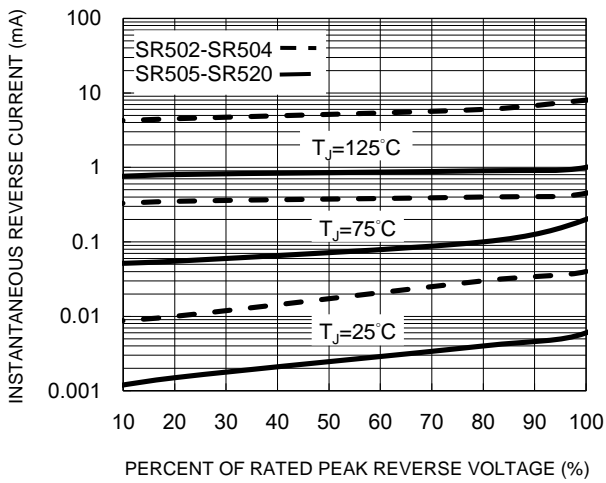
**Fig.1 Forward Current Derating Curve**



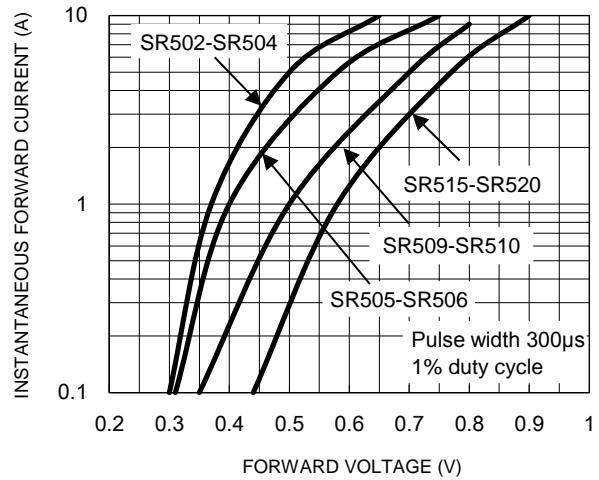
**Fig.2 Typical Junction Capacitance**



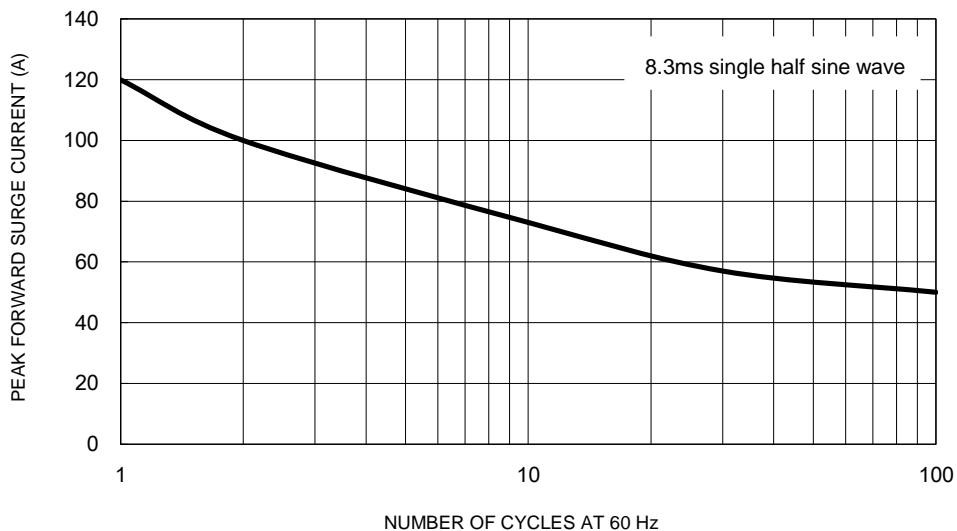
**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**



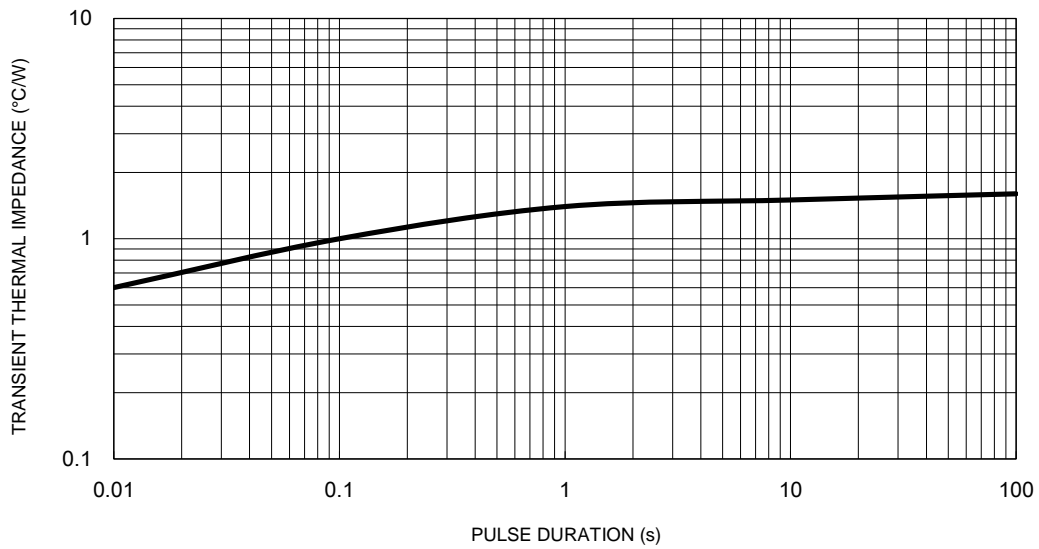
**Fig.5 Maximum Non-Repetitive Forward Surge Current**



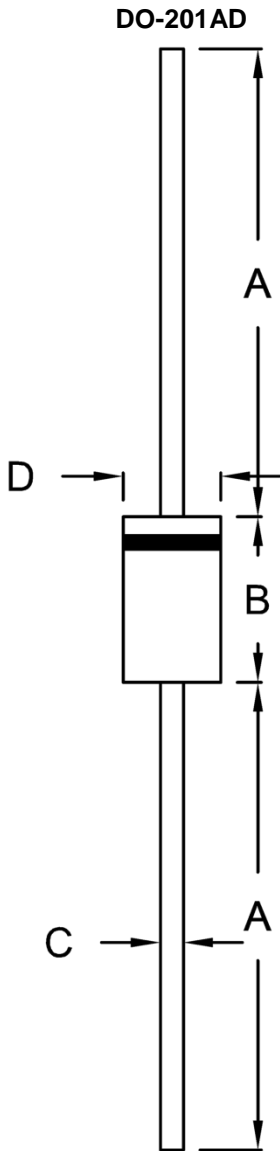
**CHARACTERISTICS CURVES**

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

**Fig.6 Typical Transient Thermal Characteristics**



**PACKAGE OUTLINE DIMENSIONS**



DIM.	Unit (mm)		Unit (inch)	
	Min.	Max.	Min.	Max.
A	25.40	-	1.000	-
B	8.50	9.50	0.335	0.374
C	1.20	1.30	0.047	0.051
D	5.00	5.60	0.197	0.220

**MARKING DIAGRAM**



- P/N = Marking Code
- G = Green Compound
- YWW = Date Code
- F = Factory Code

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