

## **Silicon Standard Recovery Diode**

**$V_{RRM} = 600 \text{ V - } 1200 \text{ V}$**   
 **$I_F = 150 \text{ A}$**

### **Features**

- High Surge Capability
- Types up to 1200 V  $V_{RRM}$

**DO-8 Package**



**Maximum ratings, at  $T_j = 25^\circ\text{C}$ , unless otherwise specified ("R" devices have leads reversed)**

Parameter	Symbol	Conditions	S150J (R)	S150K (R)	S150M (R)	S150Q (R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		600	800	1000	1200	V
RMS reverse voltage	$V_{RMS}$		420	560	700	840	V
DC blocking voltage	$V_{DC}$		600	800	1000	1200	V
Continuous forward current	$I_F$	$T_C \leq 180^\circ\text{C}$	150	150	150	150	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25^\circ\text{C}, t_p = 8.3 \text{ ms}$	3140	3140	3140	3140	A
Operating temperature	$T_j$		-65 to 200	-65 to 200	-65 to 200	-65 to 200	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-65 to 200	-65 to 200	-65 to 200	-65 to 200	$^\circ\text{C}$

**Electrical characteristics, at  $T_j = 25^\circ\text{C}$ , unless otherwise specified**

Parameter	Symbol	Conditions	S150J (R)	S150K (R)	S150M (R)	S150Q (R)	Unit
Diode forward voltage	$V_F$	$I_F = 150 \text{ A}, T_j = 25^\circ\text{C}$	1.2	1.2	1.2	1.2	V
Reverse current	$I_R$	$V_R = 600 \text{ V}, T_j = 25^\circ\text{C}$ $V_R = 600 \text{ V}, T_j = 150^\circ\text{C}$	10	10	10	10	$\mu\text{A}$
<b>Thermal characteristics</b>							
Thermal resistance, junction - case	$R_{thJC}$		0.35	0.35	0.35	0.35	$^\circ\text{C/W}$

