



# America Semiconductor

## Silicon Power Schottky Diode

1N6097 thru  
1N6098R

$V_{RRM} = 30\text{ V} - 40\text{ V}$

$I_F = 50\text{ A}$

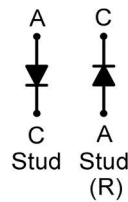
### Features

- High Surge Capability
- Types up to 40V  $V_{RRM}$

DO-5 Package

### Note:

1. Standard polarity: Stud is cathode.
2. Reverse polarity (R): Stud is anode.
3. Stud is base.



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

Parameter	Symbol	Conditions	1N6097 (R)	1N6098 (R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		30	40	V
RMS reverse voltage	$V_{RMS}$		21	28	V
DC blocking voltage	$V_{DC}$		30	40	V
Continuous forward current	$I_F$	$T_C \leq 100\text{ °C}$	50	50	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$ , $t_p = 8.3\text{ ms}$	400	400	A
Operating temperature	$T_j$		-65 to 150	-65 to 150	°C
Storage temperature	$T_{stg}$		-65 to 175	-65 to 175	°C

### Electrical characteristics, at $T_j = 25\text{ °C}$ , unless otherwise specified

Parameter	Symbol	Conditions	1N6097 (R)	1N6098 (R)	Unit
Diode forward voltage	$V_F$	$I_F = 50\text{ A}$ , $T_j = 25\text{ °C}$	0.7	0.7	V
Reverse current	$I_R$	$V_R = 30\text{ V}$ , $T_j = 25\text{ °C}$ $V_R = 30\text{ V}$ , $T_j = 125\text{ °C}$	5 250	5 250	mA

### Thermal characteristics

Parameter	Symbol	Conditions	1N6097 (R)	1N6098 (R)	Unit
Thermal resistance, junction - case	$R_{thJC}$		1.0	1.0	°C/W



