

## DUAL ULTRAFAST POWER RECTIFIER

Qualified per MIL-PRF-19500/643

### DEVICES

**1N6766**      **1N6766R**  
**1N6767**      **1N6767R**

### LEVELS

**JAN**  
**JANTX**  
**JANTXV**

### ABSOLUTE MAXIMUM RATINGS ( $T_C = +25^\circ\text{C}$ unless otherwise noted) (Per Diode)

Parameters / Test Conditions	Symbol	Value	Unit
Peak Repetitive Reverse Voltage 1N6766, R 1N6767, R	$V_{RWM}$	400 600	Vdc
Average Forward Current <sup>(1)</sup> $T_C = +100^\circ\text{C}$	$I_F$	12	A <sub>dc</sub>
Peak Surge Forward Current	$I_{FSM}$	125	A(pk)
Thermal Resistance - Junction to Case	$R_{\theta jc}$	1.8	$^\circ\text{C}/\text{W}$

**Note:**

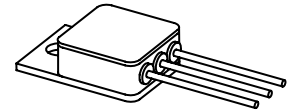
(1) Derate @ 240mA/ $^\circ\text{C}$  above  $T_C = 100^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_A = +25^\circ\text{C}$ , unless otherwise noted)

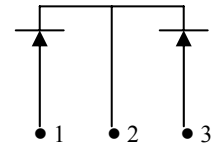
Parameters / Test Conditions	Symbol	Min.	Max.	Unit
Breakdown Voltage <sup>(2)</sup> $I_R = 10\mu\text{A}$ 1N6766 1N6767	$V_{BR}$	400 600		Vdc
Forward Voltage <sup>(2)</sup> $I_F = 6\text{A}$ $I_F = 12\text{A}$	$V_{F1}$ $V_{F2}$		1.35 1.55	Vdc
Reverse Leakage Current $V_R = 320\text{V}$ $V_R = 480\text{V}$ 1N6766 1N6767	$I_{R1}$		10	$\mu\text{A}$ <sub>dc</sub>
Reverse Leakage Current $V_R = 320\text{V}$ , $T_C = +100^\circ\text{C}$ $V_R = 480\text{V}$ , $T_C = +100^\circ\text{C}$ 1N6766 1N6767	$I_{R2}$		1.0	$\text{mA}$ <sub>dc</sub>
Reverse Recovery Time $I_F = 1.0\text{A}$ , $di/dt = 50\text{A}/\mu\text{s}$	$t_{rr}$		60	nS
Junction Capacitance $V_R = 5\text{V}$ <sub>dc</sub> , $f = 1.0\text{MHz}$	$C_j$		300	pF

**Note:**

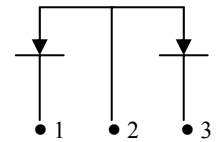
(2) Pulse Test; 300 $\mu\text{s}$ , duty cycle  $\leq 2\%$



TO-254



1N6766, 1N6767



1N6766R, 1N6767R