

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 ⁽¹⁾ $T_C = +100^\circ\text{C}$	I_F	12	Adc
Peak Surge Forward Current	I_{FSM}	125	A(pk)
Thermal Resistance - Junction to Case	$R_{\theta jc}$	1.8	$^\circ\text{C/W}$

Note:

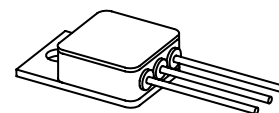
(1) Derate @ 240mA/ $^\circ\text{C}$ above $T_C = 100^\circ\text{C}$

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

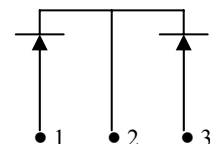
Parameters / Test Conditions	Symbol	Min.	Max.	Unit
Breakdown Voltage ⁽²⁾ $I_R = 10\mu\text{Adc}$ 1N6766 1N6767	V_{BR}	400 600		Vdc
Forward Voltage ⁽²⁾ $I_F = 6\text{Adc}$ $I_F = 12\text{Adc}$	V_{F1} V_{F2}		1.35 1.55	Vdc
Reverse Leakage Current $V_R = 320\text{V}$ $V_R = 480\text{V}$ 1N6766 1N6767	I_{R1}		10	μAdc
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	mAdc
Reverse Recovery Time $I_F = 1.0\text{A}$, $di/dt = 50\text{A}/\mu\text{s}$	t_{rr}		60	nS
Junction Capacitance $V_R = 5\text{Vdc}$, $f = 1.0\text{MHz}$	C_J		300	pF

Note:

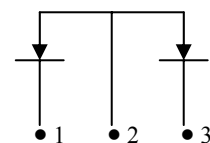
(2) Pulse Test; 300 μs , duty cycle $\leq 2\%$



TO-254



1N6766, 1N6767



1N6766R, 1N6767R