

DUAL ULTRAFAST POWER RECTIFIER

Qualified per MIL-PRF-19500/642

DEVICES

1N6762

1N6764

1N6762R

1N6764R

1N6763

1N6765

1N6763R

1N6765R

LEVELS

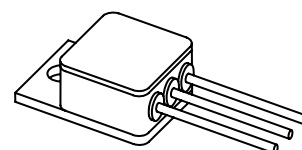
JAN

JANTX

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

Parameters / Test Conditions	Symbol	Value	Unit
Peak Repetitive Reverse Voltage 1N6762, R 1N6763, R 1N6764, R 1N6765, R	V_{RWM}	50 100 150 200	Vdc
Average Forward Current ⁽¹⁾ $T_C = +100^\circ\text{C}$	I_F	12	Adc
Peak Surge Forward Current	I_{FSM}	165	A(pk)
Thermal Resistance - Junction to Case	$R_{\theta jc}$	2.0	$^\circ\text{C/W}$



TO-254

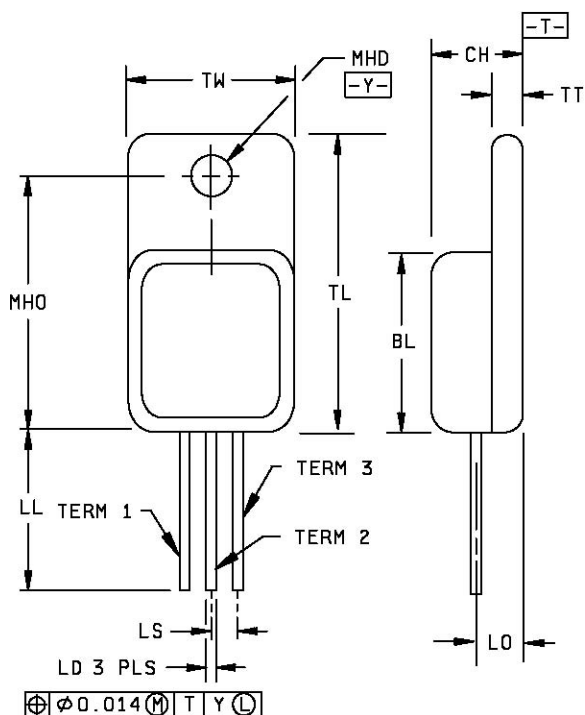
Note:

- (1) Derate @ 240mA/°C above $T_C = 100^\circ\text{C}$
- (2) Each individual diode

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

Parameters / Test Conditions	Symbol	Min.	Max.	Unit
Breakdown Voltage ⁽²⁾ $I_R = 10\mu\text{Adc}$ 1N6762, R 1N6763, R 1N6764, R 1N6765, R	V_{BR}	50 100 150 200		Vdc
Forward Voltage ⁽²⁾ $I_F = 6\text{Adc}$ $I_F = 12\text{Adc}$	V_{F1} V_{F2}		0.95 1.05	Vdc
Reverse Leakage Current $V_R = 50\text{V}$ $V_R = 100\text{V}$ $V_R = 150\text{V}$ $V_R = 200\text{V}$ 1N6762, R 1N6763, R 1N6764, R 1N6765, R	I_{R1}		10	μAdc
Reverse Leakage Current $V_R = 50\text{V}$ $T_A = 100^\circ\text{C}$ $V_R = 100\text{V}$ $T_A = 100^\circ\text{C}$ $V_R = 150\text{V}$ $T_A = 100^\circ\text{C}$ $V_R = 200\text{V}$ $T_A = 100^\circ\text{C}$ 1N6762, R 1N6763, R 1N6764, R 1N6765, R	I_{R2}		500	μAdc
Reverse Recovery Time $I_F = 1.0\text{A}$, $di/dt = 50\text{A}/\mu\text{s}$	t_{rr}		35	nS
Junction Capacitance $V_R = 5\text{Vdc}$, $f = 1.0\text{MHz}$	C_J		300	pF

PACKAGE DIMENSIONS



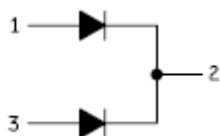
Symbol	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
BL	.535	.545	13.59	13.84
CH	.249	.260	6.32	6.60
LD	.035	.045	0.89	1.14
LL	.510	.570	12.95	14.48
LO	.150 typ		3.81 typ	
LS	.150 bsc		3.81 bsc	
MHD	.139	.149	3.53	3.78
MHO	.665	.685	16.89	17.40
TL	.790	.800	20.07	20.32
TT	.040	.050	1.02	1.27
TW	.535	.545	13.59	13.84

NOTES:

- 1 Dimensions are in inches.
- 2 Millimeters are given for general information only.
- 3 All terminals are isolated from case.
- 4 In accordance with ASME Y14.5M, diameters are equivalent to ϕ x symbology.

SCHEMATIC

1N6762, 1N6763, 1N6764, 1N6765

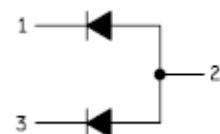


Terminal

Description

- | | |
|---|---------|
| 1 | Anode 1 |
| 2 | Cathode |
| 3 | Anode 2 |

1N6762R, 1N6763R, 1N6764R, 1N6765R



Terminal

Description

- | | |
|---|-----------|
| 1 | Cathode 1 |
| 2 | Anode |
| 3 | Cathode 2 |

FIGURE 1: Physical dimensions and configuration (TO-254AA, isolated)