

DUAL ULTRAFAST POWER RECTIFIER

Qualified per MIL-PRF-19500/642

DEVICES

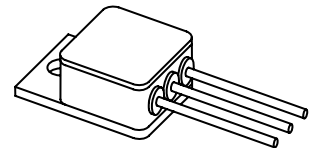
1N6762	1N6764	1N6762R	1N6764R
1N6763	1N6765	1N6763R	1N6765R

LEVELS

JAN
JANTX
JANTXV

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

Parameters / Test Conditions	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	V_{RWM}	50	Vdc	
1N6762, R		100		
1N6763, R		150		
1N6764, R		200		
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

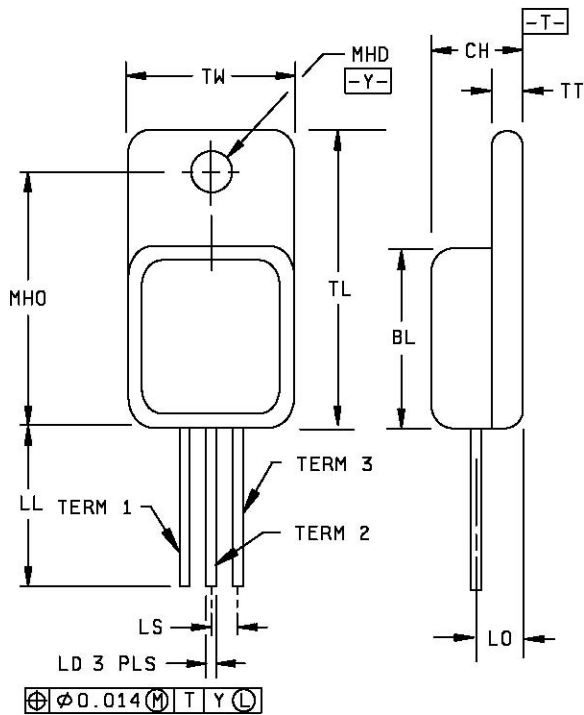
Note:

- (1) Derate @ 240mA/ $^\circ\text{C}$ 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⁾	V_{BR}	50		Vdc		
1N6762, R		100				
1N6763, R		150				
1N6764, R		200				
Forward Voltage ⁽²⁾	V_{F1}		0.95	Vdc		
$I_F = 6\text{A dc}$			1.05			
$I_F = 12\text{A dc}$	V_{F2}					
Reverse Leakage Current	I_{R1}		10	$\mu\text{A dc}$		
$V_R = 50\text{V}$					1N6762, R	
$V_R = 100\text{V}$					1N6763, R	
$V_R = 150\text{V}$					1N6764, R	
$V_R = 200\text{V}$	1N6765, R					
Reverse Leakage Current	I_{R2}		500	$\mu\text{A dc}$		
$V_R = 50\text{V}$					$T_A = 100^\circ\text{C}$	1N6762, R
$V_R = 100\text{V}$					$T_A = 100^\circ\text{C}$	1N6763, R
$V_R = 150\text{V}$					$T_A = 100^\circ\text{C}$	1N6764, R
$V_R = 200\text{V}$	$T_A = 100^\circ\text{C}$	1N6765, R				
Reverse Recovery Time	t_{rr}		35	nS		
$I_F = 1.0\text{A}$, $di/dt = 50\text{A}/\mu\text{s}$						
Junction Capacitance	C_J		300	pF		
$V_R = 5\text{V dc}$, $f = 1.0\text{MHz}$						

PACKAGE DIMENSIONS



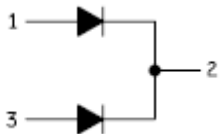
Symbol	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
BL	.535	.545	13.59	13.84
CH	.249	.260	6.32	6.60
LD	.035	.045	0.89	1.14
LL	.510	.570	12.95	14.48
LO	.150 typ		3.81 typ	
LS	.150 bsc		3.81 bsc	
MHD	.139	.149	3.53	3.78
MHO	.665	.685	16.89	17.40
TL	.790	.800	20.07	20.32
TT	.040	.050	1.02	1.27
TW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

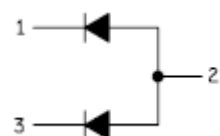


Terminal

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)