6 Lake Street, Lawrence, MA 01841
1-800-446-1158 / (978) 620-2600 / Fax: (978) 689-0803
Website: http://www.microsemi.com

TECHNICAL DATA SHEET

DUAL ULTRAFAST POWER RECTIFIER

Qualified per MIL-PRF-19500/642

DEVICES

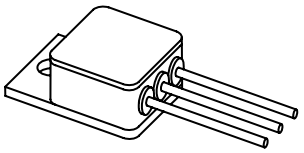
1N6762 **1N6764** **1N6762R** **1N6764R**
1N6763 **1N6765** **1N6763R** **1N6765R**

LEVELS

JAN
JANTX
JANTXV

ABSOLUTE MAXIMUM RATINGS ***(T_C = +25°C unless otherwise noted)***

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



TO-254

Note:
(1) Derate @ 240mA/°C above T_C = 100°C
(2) Each individual diode

ELECTRICAL CHARACTERISTICS ***(T_A = +25°C, unless otherwise noted)***

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

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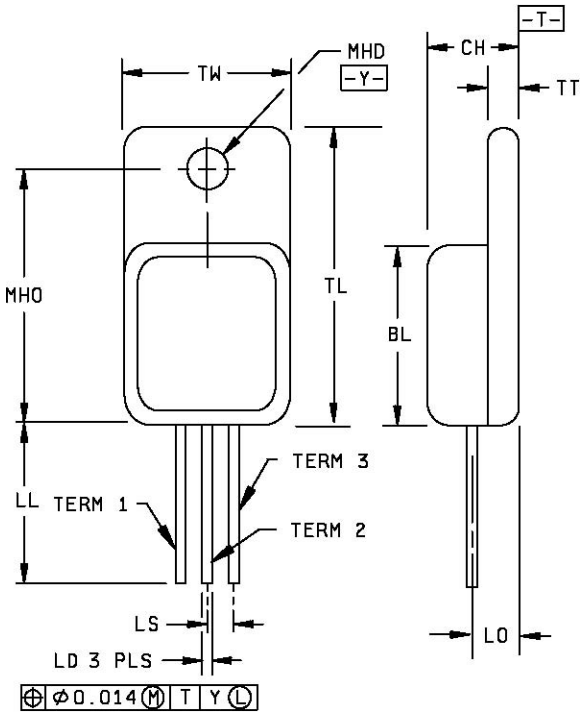
PACKAGE DIMENSIONS

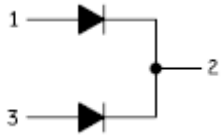


Symbol	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
BL	.535	.545	13.59	13.84
CH	.249	.260	6.32	6.60
LD	.035	.045	0.89	1.14
LL	.510	.570	12.95	14.48
LO	.150 typ		3.81 typ	
LS	.150 bsc		3.81 bsc	
MHD	.139	.149	3.53	3.78
MHO	.665	.685	16.89	17.40
TL	.790	.800	20.07	20.32
TT	.040	.050	1.02	1.27
TW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

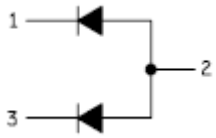
SCHEMATIC

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)