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

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

Parameters / Test Conditions	Symbol	Min.	Max.	Unit
ON CHARACTERISTICS (2)				
Forward-Current Transfer Ratio I_C = 1.0Adc, V_{CE} = 4.0Vdc I_C = 20Adc, V_{CE} = 4.0Vdc I_C = 50Adc, V_{CE} = 4.0Vdc	h_{FE}	 50 30 10	120	
Collector-Emitter Saturation Voltage I_C = 20Adc, I_B = 2.0Adc I_C = 50Adc, I_B = 10Adc	$V_{CE(sat)}$		 1.0 3.0	Vdc
Base-Emitter Saturation Voltage I_C = 20Adc, I_B = 2.0Adc	$V_{BE(sat)}$		1.8	Vdc

DYNAMIC CHARACTERISTICS

Parameters / Test Conditions	Symbol	Min.	Max.	Unit
Magnitude of Common Emitter Small-Signal Short-Circuit, Forward Current Transfer Ratio I_C = 1.0Adc, V_{CE} = 10Vdc, f = 10MHz	$\|h_{fe}\|$	3.0	12	
Output Capacitance V_{CB} = 10Vdc, I_E = 0, f = 1.0MHz	C_{obo}		600	pF

SWITCHING CHARACTERISTICS

Parameters / Test Conditions	Symbol	Min.	Max.	Unit
Turn-On Time V_{CC} = 80Vdc; I_C = 20Adc; I_B = 2.0Adc	t_{on}		0.5	µs
Turn-Off Time V_{CC} = 80Vdc ; I_C = 20Adc; I_{B1} = -I_{B2} = 2.0Adc	t_{off}		1.05	µs

SAFE OPERATING AREA

DC Tests
T_C = +25°C, 1 Cycle, t = 1.0s

Test 1 V_{CE} = 5.0Vdc, I_C = 50Adc	All Types
Test 2 V_{CE} = 8.6Vdc, I_C = 165mAdc	All Types
Test 3 V_{CE} = 80Vdc, I_C = 29mAdc	2N6274
Test 4 V_{CE} = 120Vdc, I_C = 110mAdc	2N6277

(2) Pulse Test: Pulse Width = 300µs, Duty Cycle ≤ 2.0%

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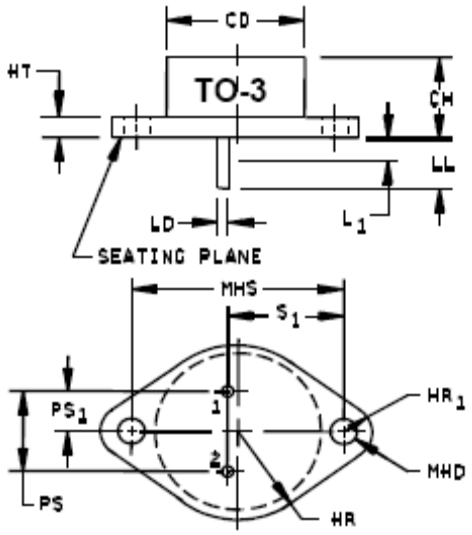
PACKAGE DIMENSIONS



Ltr	Dimensions				Notes
	Inches		Millimeters		
	Min	Max	Min	Max	
CD		.875		22.22	3
CH	.250	.328	6.35	8.33	
HR	.495	.525	12.57	13.34	
HR1	.131	.188	3.33	4.78	6
HT	.060	.135	1.52	3.43	
LD	.057	.063	1.45	1.60	5, 9
LL	.312	.500	7.92	12.70	4, 5, 9
L_1		.050		1.27	5, 9
MHD	.151	.161	3.84	4.09	7
MHS	1.177	1.197	29.90	30.40	
PS	.420	.440	10.67	11.18	
PS_1	.205	.225	5.21	5.72	5
S_1	.655	.675	16.64	17.15	

NOTE:

1. Dimensions are in inches.
* 2. Millimeters are given for general information only.
3. Body contour is optional within zone defined by CD.
4. These dimensions shall be measured at points .050 inch (1.27 mm) to .055 inch (1.40 mm) below seating plane. When gauge is not used, measurement shall be made at seating plane.
5. Both terminals.
6. At both ends.
7. Two holes.
8. Terminal 1 is the emitter, terminal 2 is base. The collector shall be electrically connected to the case.
* 9. LD applies between L1 and LL. Lead diameter shall not exceed twice LD within L1.
* 10. In accordance with ASME Y14.5M, diameters are equivalent to φx symbology.
11. The seating plane of the header shall be flat within .001 inch (0.03 mm) concave to .004 inch (0.10 mm) convex inside a .930 inch (23.62 mm) diameter circle on the center of the header and flat within .001 inch (0.03 mm) concave to .006 inch (0.15 mm) convex overall.

*** FIGURE 1**. Physical dimensions (TO-3)