

Is Now Part of



ON Semiconductor®

To learn more about ON Semiconductor, please visit our website at www.onsemi.com

ON Semiconductor and the ON Semiconductor logo are trademarks of Semiconductor Components Industries, LLC dba ON Semiconductor or its subsidiaries in the United States and/or other countries. ON Semiconductor owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of ON Semiconductor's product/patent coverage may be accessed at www.onsemi.com/site/pdf/Patent-Marking.pdf. ON Semiconductor reserves the right to make changes without further notice to any products herein. ON Semiconductor makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does ON Semiconductor assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Buyer is responsible for its products and applications using ON Semiconductor products, including compliance with all laws, regulations and safety requirements or standards, regardless of any support or applications information provided by ON Semiconductor. "Typical" parameters which may be provided in ON Semiconductor data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. ON Semiconductor does not convey any license under its patent rights nor the rights of others. ON Semiconductor products are not designed, intended, or authorized for use as a critical component in life support systems or any EDA Class 3 medical devices with a same or similar classification in a foreign jurisdiction or any devices intended for implantation in the human body. Should Buyer purchase or use ON Semiconductor products for any such unintended or unauthorized application, Buyer shall indemnify and hold ON Semiconductor and its officers, employees, emplo



January 2008

74AC245, 74ACT245 Octal Bidirectional Transceiver with 3-STATE Inputs/Outputs

Features

- I_{CC} and I_{OZ} reduced by 50%
- Non-inverting buffers
- Bidirectional data path
- A and B outputs source/sink 24mA
- ACT245 has TTL-compatible inputs

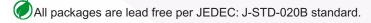
General Description

The AC/ACT245 contains eight non-inverting bidirectional buffers with 3-STATE outputs and is intended for bus-oriented applications. Current sinking capability is 24mA at both the A and B ports. The Transmit/Receive (T/\overline{R}) input determines the direction of data flow through the bidirectional transceiver. Transmit (active-HIGH) enables data from A ports to B ports; Receive (active-LOW) enables data from B ports to A ports. The Output Enable input, when HIGH, disables both A and B ports by placing them in a HIGH Z condition.

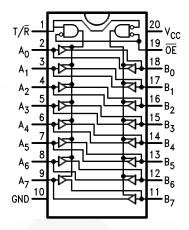
Ordering Information

Order Number	Package Number	Package Description
74AC245SC	M20B	20-Lead Small Outline Integrated Circuit (SOIC), JEDEC MS-013, 0.300" Wide
74AC245SJ	M20D	20-Lead Small Outline Package (SOP), EIAJ TYPE II, 5.3mm Wide
74AC245MTC	MTC20	20-Lead Thin Shrink Small Outline Package (TSSOP), JEDEC MO-153, 4.4mm Wide
74AC245PC	N20A	20-Lead Plastic Dual-In-Line Package (PDIP), JEDEC MS-001, 0.300" Wide
74ACT245SC	M20B	20-Lead Small Outline Integrated Circuit (SOIC), JEDEC MS-013, 0.300" Wide
74ACT245SJ	M20D	20-Lead Small Outline Package (SOP), EIAJ TYPE II, 5.3mm Wide
74ACT245MSA	MSA20	20-Lead Shrink Small Outline Package (SSOP), JEDEC MO-150, 5.3mm Wide
74ACT245MTC	MTC20	20-Lead Thin Shrink Small Outline Package (TSSOP), JEDEC MO-153, 4.4mm Wide
74ACT245PC	N20A	20-Lead Plastic Dual-In-Line Package (PDIP), JEDEC MS-001, 0.300" Wide

Device also available in Tape and Reel. Specify by appending suffix letter "X" to the ordering number.



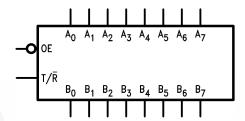
Connection Diagram



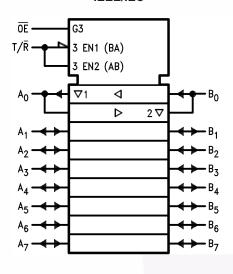
Pin Description

Pin Names	Description
ŌĒ	Output Enable Input
T/R	Transmit/Receive Input
A ₀ -A ₇	Side A 3-STATE Inputs or 3-STATE Outputs
B ₀ –B ₇	Side B 3-STATE Inputs or 3-STATE Outputs

Logic Symbol



IEEE/IEC



Truth Table

Inputs		
ŌĒ	T/R	Outputs
L	L	Bus B Data to Bus A
L	Н	Bus A Data to Bus B
Н	X	HIGH-Z State

H = HIGH Voltage Level

L = LOW Voltage Level

X = Immaterial

Absolute Maximum Ratings

Stresses exceeding the absolute maximum ratings may damage the device. The device may not function or be operable above the recommended operating conditions and stressing the parts to these levels is not recommended. In addition, extended exposure to stresses above the recommended operating conditions may affect device reliability. The absolute maximum ratings are stress ratings only.

Symbol	Parameter	Rating
V _{CC}	Supply Voltage	-0.5V to +7.0V
I _{IK}	DC Input Diode Current	
	$V_{I} = -0.5V$	-20mA
	$V_{I} = V_{CC} + 0.5$	+20mA
V _I	DC Input Voltage	-0.5V to V _{CC} + 0.5V
I _{OK}	DC Output Diode Current	
	$V_{O} = -0.5V$	-20mA
	$V_{O} = V_{CC} + 0.5V$	+20mA
Vo	DC Output Voltage	-0.5V to V _{CC} + 0.5V
Io	DC Output Source or Sink Current	±50mA
I _{CC} or I _{GND}	DC V _{CC} or Ground Current per Output Pin	±50mA
T _{STG}	Storage Temperature	–65°C to +150°C
T_J	Junction Temperature	140°C

Recommended Operating Conditions

The Recommended Operating Conditions table defines the conditions for actual device operation. Recommended operating conditions are specified to ensure optimal performance to the datasheet specifications. Fairchild does not recommend exceeding them or designing to absolute maximum ratings.

Symbol	Parameter	Rating	
V _{CC}	Supply Voltage		
	AC	2.0V to 6.0V	
	ACT	4.5V to 5.5V	
VI	Input Voltage	0V to V _{CC}	
Vo	Output Voltage	0V to V _{CC}	
T _A	Operating Temperature —4		
ΔV / Δt	Minimum Input Edge Rate, AC Devices:	125mV/ns	
	V _{IN} from 30% to 70% of V _{CC} , V _{CC} @ 3.3V, 4.5V, 5.5V		
ΔV / Δt	Minimum Input Edge Rate, ACT Devices: 125mV/		
	V _{IN} from 0.8V to 2.0V, V _{CC} @ 4.5V, 5.5V		

DC Electrical Characteristics for AC

				T _A = -	⊦25°C	$T_A = -40^{\circ}C \text{ to } +85^{\circ}C$	
Symbol	Parameter	V _{CC} (V)	Conditions	Тур.	G	uaranteed Limits	Units
V _{IH}	Minimum HIGH Level	3.0	$V_{OUT} = 0.1V$ or	1.5	2.1	2.1	V
	Input Voltage	4.5	V _{CC} – 0.1V	2.25	3.15	3.15	
		5.5		2.75	3.85	3.85	
V _{IL}	Maximum LOW Level	3.0	$V_{OUT} = 0.1V$ or	1.5	0.9	0.9	V
	Input Voltage	4.5	V _{CC} – 0.1V	2.25	1.35	1.35	
		5.5		2.75	1.65	1.65	
V _{OH}	Minimum HIGH Level	3.0	$I_{OUT} = -50\mu A$	2.99	2.9	2.9	V
	Output Voltage	4.5		4.49	4.4	4.4	
		5.5		5.49	5.4	5.4	
		3.0	$V_{IN} = V_{IL} \text{ or } V_{IH},$ $I_{OH} = -12\text{mA}$		2.56	2.46	
		4.5	$V_{IN} = V_{IL} \text{ or } V_{IH},$ $I_{OH} = -24\text{mA}$		3.86	3.76	
		5.5	$V_{IN} = V_{IL} \text{ or } V_{IH},$ $I_{OH} = -24\text{mA}^{(1)}$		4.86	4.76	
V _{OL}	Maximum LOW Level	3.0	$I_{OUT} = 50\mu A$	0.002	0.1	0.1	V
	Output Voltage	4.5		0.001	0.1	0.1	
		5.5		0.001	0.1	0.1	
		3.0	$V_{IN} = V_{IL} \text{ or } V_{IH},$ $I_{OL} = 12\text{mA}$		0.36	0.44	
		4.5	$V_{IN} = V_{IL} \text{ or } V_{IH},$ $I_{OL} = 24\text{mA}$		0.36	0.44	
		5.5	$V_{IN} = V_{IL} \text{ or } V_{IH},$ $I_{OL} = 24\text{mA}^{(1)}$		0.36	0.44	
I _{IN} ⁽²⁾	Maximum Input Leakage Current	5.5	$V_I = V_{CC}$, GND		±0.1	±1.0	μA
I _{OLD}	Minimum Dynamic	5.5	V _{OLD} = 1.65V Max.			75	mA
I _{OHD}	Output Current ⁽³⁾	5.5	V _{OHD} = 3.85V Min.			-75	mA
I _{CC} ⁽²⁾	Maximum Quiescent Supply Current	5.5	$V_{IN} = V_{CC}$ or GND		4.0	40.0	μA
I _{OZT}	Maximum I/O Leakage Current	5.5	V_{I} (OE) = V_{IL} , V_{IH} ; V_{I} = V_{CC} , GND; V_{O} = V_{CC} , GND		±0.3	±3.0	μА

Notes:

- 1. All outputs loaded; thresholds on input associated with output under test.
- 2. I_{IN} and I_{CC} @ 3.0V are guaranteed to be less than or equal to the respective limit @ 5.5V V_{CC} .
- 3. Maximum test duration 2.0ms, one output loaded at a time.

DC Electrical Characteristics for ACT

				T _A = -	+25°C	$T_A = -40^{\circ}C \text{ to } +85^{\circ}C$	
Symbol	Parameter	V _{CC} (V)	Conditions	Тур.	G	uaranteed Limits	Units
V _{IH}	Minimum HIGH Level	4.5	$V_{OUT} = 0.1V$ or	1.5	2.0	2.0	V
	Input Voltage	5.5	V _{CC} – 0.1V	1.5	2.0	2.0	
V _{IL}	Maximum LOW	4.5	$V_{OUT} = 0.1V$ or	1.5	0.8	0.8	V
	Level Input Voltage	5.5	V _{CC} – 0.1V	1.5	0.8	0.8	
V _{OH}	Minimum HIGH Level	4.5	$I_{OUT} = -50\mu A$	4.49	4.4	4.4	V
	Output Voltage	5.5		5.49	5.4	5.4	
		4.5	$V_{IN} = V_{IL} \text{ or } V_{IH},$ $I_{OH} = -24\text{mA}$		3.86	3.76	
		5.5	$V_{IN} = V_{IL} \text{ or } V_{IH},$ $I_{OH} = -24\text{mA}^{(4)}$		4.86	4.76	
V _{OL}	Maximum LOW	4.5	$I_{OUT} = 50\mu A$	0.001	0.1	0.1	V
	Level Output Voltage	5.5		0.001	0.1	0.1	
		4.5	$V_{IN} = V_{IL} \text{ or } V_{IH},$ $I_{OL} = 24\text{mA}$		0.36	0.44	
		5.5	$V_{IN} = V_{IL} \text{ or } V_{IH},$ $I_{OL} = 24\text{mA}^{(4)}$		0.36	0.44	
I _{IN}	Maximum Input Leakage Current	5.5	$V_I = V_{CC}$, GND		±0.1	±1.0	μA
I _{CCT}	Maximum I _{CC} /Input	5.5	$V_I = V_{CC} - 2.1V$	0.6		1.5	mA
I_{OLD}	Minimum Dynamic	5.5	$V_{OLD} = 1.65V Max.$			75	mA
I_{OHD}	Output Current ⁽⁵⁾	5.5	V _{OHD} = 3.85V Min.			-75	mA
I _{CC}	Maximum Quiescent Supply Current	5.5	$V_{IN} = V_{CC}$ or GND		4.0	40.0	μA
I _{OZT}	Maximum I/O Leakage Current	5.5	$\begin{aligned} &V_{I}\left(OE\right)=V_{IL},V_{IH};\\ &V_{I}=V_{CC},GND;\\ &V_{O}=V_{CC},GND \end{aligned}$		±0.3	±3.0	μA

Notes:

- 4. All outputs loaded; thresholds on input associated with output under test.
- 5. Maximum test duration 2.0ms, one output loaded at a time.

AC Electrical Characteristics for AC

			T _A	$egin{aligned} T_{A} &= +25^{\circ}C, \ C_{L} &= 50 pF \end{aligned}$		$ \begin{array}{c c} T_A = +25^{\circ}C, & T_A = -40^{\circ}C \text{ to } +85^{\circ}C, \\ C_L = 50 \text{pF} & C_L = 50 \text{pF} \end{array} $		
Symbol	Parameter	$V_{CC}(V)^{(6)}$	Min.	Тур.	Max.	Min.	Max.	Units
t _{PLH}	Propagation Delay,	3.3	1.5	5.0	8.5	1.0	9.0	ns
	A_n to B_n or B_n to A_n	5.0	1.5	3.5	6.5	1.0	7.0	
t _{PHL}	Propagation Delay,	3.3	1.5	5.0	8.5	1.0	9.0	ns
	A_n to B_n or B_n to A_n	5.0	1.5	3.5	6.0	1.0	7.0	
t _{PZH}	Output Enable Time	3.3	2.5	7.0	11.5	2.0	12.5	ns
		5.0	1.5	5.0	8.5	1.0	9.0	
t _{PZL}	Output Enable Time	3.3	2.5	7.5	12.0	2.0	13.5	ns
		5.0	1.5	5.5	9.0	1.0	9.5	
t _{PHZ}	Output Disable Time	3.3	2.0	6.5	12.0	1.0	12.5	ns
		5.0	1.5	5.5	9.0	1.0	10.0	
t _{PLZ}	Output Disable Time	3.3	2.0	7.0	11.5	1.5	13.0	ns
		5.0	1.5	5.5	9.0	1.0	10.0	

Note:

6. Voltage range 3.3 is 3.3V \pm 0.3V. Voltage range 5.0 is 5.0V \pm 0.5V.

AC Electrical Characteristics for ACT

				_λ = +25° _L = 50p			to +85°C, 50pF	
Symbol	Parameter	$V_{CC}(V)^{(7)}$	Min.	Тур.	Max.	Min.	Max.	Units
t _{PLH}	Propagation Delay, A _n to B _n or B _n to A _n	5.0	1.5	4.0	7.5	1.5	8.0	ns
t _{PHL}	Propagation Delay, A _n to B _n or B _n to A _n	5.0	1.5	4.0	8.0	1.0	9.0	ns
t _{PZH}	Output Enable Time	5.0	1.5	5.0	10.0	1.5	11.0	ns
t _{PZL}	Output Enable Time	5.0	1.5	5.5	10.0	1.5	12.0	ns
t _{PHZ}	Output Disable Time	5.0	1.5	5.5	10.0	1.0	11.0	ns
t _{PLZ}	Output Disable Time	5.0	2.0	5.0	10.0	1.5	11.0	ns

Note:

7. Voltage range 5.0 is $5.0V \pm 0.5V$.

Capacitance

	Symbol	Parameter	Conditions	Тур.	Units
	C _{IN}	Input Capacitance	V _{CC} = OPEN	4.5	pF
Ī	C _{I/O}	Input/Output Capacitance	V _{CC} = 5.0V	15.0	pF
Ī	C _{PD}	Power Dissipation Capacitance	V _{CC} = 5.0V	45.0	pF

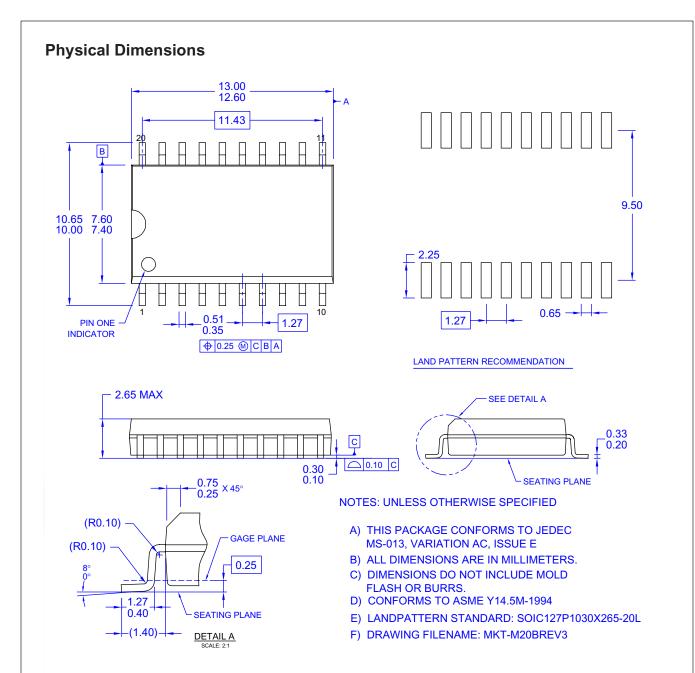
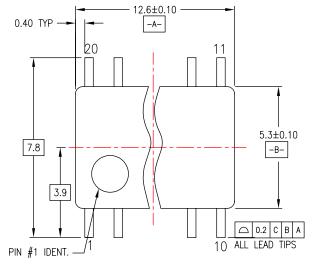
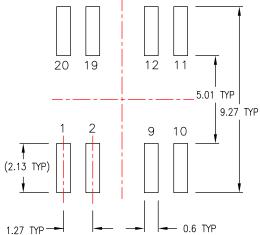


Figure 1. 20-Lead Small Outline Integrated Circuit (SOIC), JEDEC MS-013, 0.300" Wide

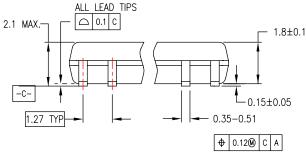
Package drawings are provided as a service to customers considering Fairchild components. Drawings may change in any manner without notice. Please note the revision and/or date on the drawing and contact a Fairchild Semiconductor representative to verify or obtain the most recent revision. Package specifications do not expand the terms of Fairchild's worldwide terms and conditions, specifically the warranty therein, which covers Fairchild products.

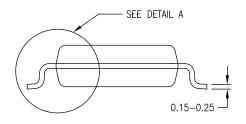
Always visit Fairchild Semiconductor's online packaging area for the most recent package drawings: http://www.fairchildsemi.com/packaging/





LAND PATTERN RECOMMENDATION

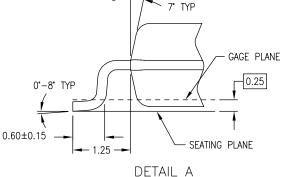




DIMENSIONS ARE IN MILLIMETERS

NOTES:

- A. CONFORMS TO EIAJ EDR-7320 REGISTRATION, ESTABLISHED IN DECEMBER, 1998.
 B. DIMENSIONS ARE IN MILLIMETERS.
 C. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH, AND TIE BAR EXTRUSIONS.



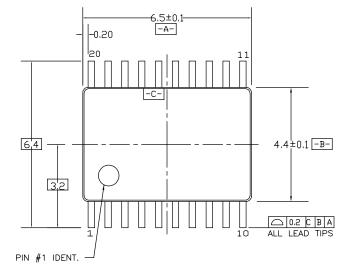
M20DREVC

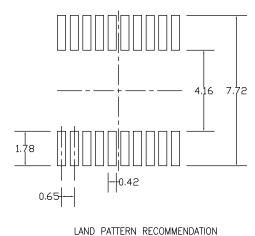
Figure 2. 20-Lead Small Outline Package (SOP), EIAJ TYPE II, 5.3mm Wide

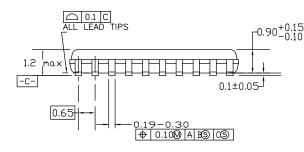
Package drawings are provided as a service to customers considering Fairchild components. Drawings may change in any manner without notice. Please note the revision and/or date on the drawing and contact a Fairchild Semiconductor representative to verify or obtain the most recent revision. Package specifications do not expand the terms of Fairchild's worldwide terms and conditions, specifically the warranty therein, which covers Fairchild products.

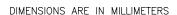
Always visit Fairchild Semiconductor's online packaging area for the most recent package drawings:

http://www.fairchildsemi.com/packaging/



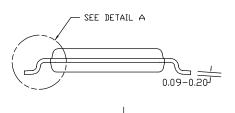


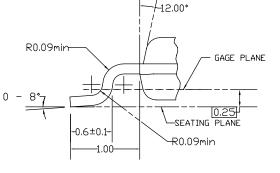




NOTES:

- A. CONFORMS TO JEDEC REGISTRATION MD-153, VARIATION AC, REF NOTE 6, DATE $7/93.\,$
- B. DIMENSIONS ARE IN MILLIMETERS.
- C. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLDS FLASH, AND TIE BAR EXTRUSIONS.
- D. DIMENSIONS AND TOLERANCES PER ANSI Y14.5M, 1982.





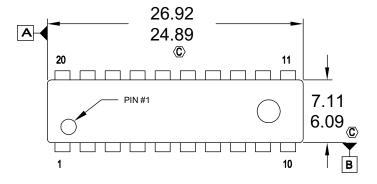
DETAIL A

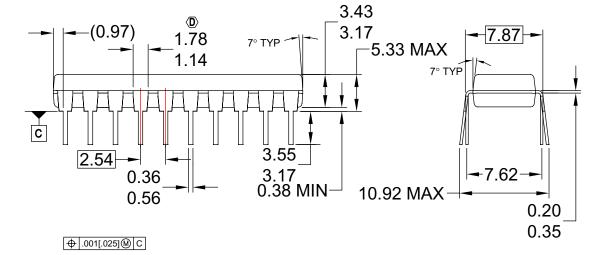
MTC20REVD1

Figure 3. 20-Lead Thin Shrink Small Outline Package (TSSOP), JEDEC MO-153, 4.4mm Wide

Package drawings are provided as a service to customers considering Fairchild components. Drawings may change in any manner without notice. Please note the revision and/or date on the drawing and contact a Fairchild Semiconductor representative to verify or obtain the most recent revision. Package specifications do not expand the terms of Fairchild's worldwide terms and conditions, specifically the warranty therein, which covers Fairchild products.

Always visit Fairchild Semiconductor's online packaging area for the most recent package drawings: http://www.fairchildsemi.com/packaging/





NOTES:
A. CONFORMS TO JEDEC REGISTRATION MS-001,
VARIATIONS AD.

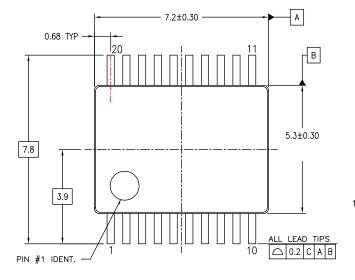
- **B. ALL DIMENSIONS ARE IN MILLIMETERS**
- © DOES NOT INCLUDE MOLD FLASH OR PROTRUSIONS.
 MOLD FLASH OR PROTRUSIONS SHALL NOT EXCEED
- 0.25MM.

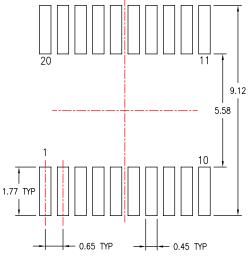
 D. DOES NOT INCLUDE DAMBAR PROTRUSIONS. DAMBAR PROTRUSIONS SHALL NOT EXCEED
- E. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
- F. DRAWING FILE NAME: N20AREV8

Figure 4. 20-Lead Plastic Dual-In-Line Package (PDIP), JEDEC MS-001, 0.300" Wide

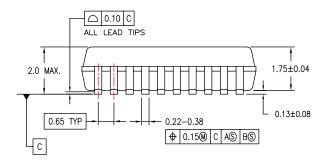
Package drawings are provided as a service to customers considering Fairchild components. Drawings may change in any manner without notice. Please note the revision and/or date on the drawing and contact a Fairchild Semiconductor representative to verify or obtain the most recent revision. Package specifications do not expand the terms of Fairchild's worldwide terms and conditions, specifically the warranty therein, which covers Fairchild products.

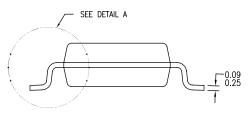
Always visit Fairchild Semiconductor's online packaging area for the most recent package drawings: http://www.fairchildsemi.com/packaging/





LAND PATTERN RECOMMENDATIONS

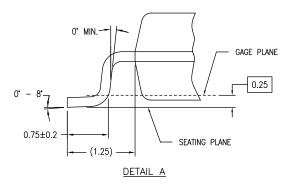




DIMENSIONS ARE IN MILLIMETERS

NOTES:

- A. CONFORMS TO JEDEC REGISTRATION MO-150, VARIATION AE, DATE 1/94.
- B. DIMENSIONS ARE IN MILLIMETERS.
- C. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH, AND TIE BAR EXTRUSIONS.
- D. DIMENSIONS AND TOLERANCES PER ASME Y14.5M 1994.



MSA20REVB

Figure 5. 20-Lead Shrink Small Outline Package (SSOP), JEDEC MO-150, 5.3mm Wide

Package drawings are provided as a service to customers considering Fairchild components. Drawings may change in any manner without notice. Please note the revision and/or date on the drawing and contact a Fairchild Semiconductor representative to verify or obtain the most recent revision. Package specifications do not expand the terms of Fairchild's worldwide terms and conditions, specifically the warranty therein, which covers Fairchild products.

Always visit Fairchild Semiconductor's online packaging area for the most recent package drawings: http://www.fairchildsemi.com/packaging/

©1988 Fairchild Semiconductor Corporation 74AC245, 74ACT245 Rev. 1.5.0





TRADEMARKS

The following includes registered and unregistered trademarks and service marks, owned by Fairchild Semiconductor and/or its global subsidiaries, and is not intended to be an exhaustive list of all such trademarks.

Build it Now™ CorePLUS™ $CROSSVOLT^{\text{\tiny TM}}$ **CTL™**

Current Transfer Logic™ EcoSPARK® EZSWITCH™ *

Fairchild[®] Fairchild Semiconductor® FACT Quiet Series™

FACT[®] $\mathsf{FAST}^{\mathbb{R}}$ FastvCore™ FlashWriter® FPS™ $\mathsf{FRFET}^{\scriptscriptstyle{\textcircled{\tiny{\$}}}}$

Global Power Resource^{sм}

Green FPS™

Green FPS™ e-Series™

GTO™ i-Lo™ IntelliMAX™ ISOPLANAR™

MegaBuck™ MICROCOUPLER™ MicroFET™

MicroPak™ MillerDrive™ Motion-SPM™ OPTOLOGIC®

OPTOPLANAR®

PDP-SPM™ Power220® Power247® POWEREDGE® Power-SPM™

Programmable Active Droop™

QFET' QSTM

Quiet Series™ RapidConfigure™ SMART START™

SPM® STEALTH™ SuperFET™ SuperSOT™-3

SuperSOT™-6 SuperSOT™-8

SyncFET™ SYSTEM ®
GENERAL The Power Franchise® bwer franchise PowerTrench® TinyBoost™ TinvBuck™ $\mathsf{TinyLogic}^{\mathbb{R}}$ TINYOPTO™ QT Optoelectronics™ TinyPower™ TinyPWM™ TinyWire™

> uSerDes™ **UHC**® Ultra FRFET™ UniFET™ VCX^{TM}

* EZSWITCH™ and FlashWriter® are trademarks of System General Corporation, used under license by Fairchild Semiconductor.

DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION, OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS. NOR THE RIGHTS OF OTHERS. THESE SPECIFICATIONS DO NOT EXPAND THE TERMS OF FAIRCHILD'S WORLDWIDE TERMS AND CONDITIONS, SPECIFICALLY THE WARRANTY THEREIN, WHICH COVERS THESE PRODUCTS.

LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF FAIRCHILD SEMICONDUCTOR CORPORATION.

- 1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
- 2. A critical component in any component of a life support, device, or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition				
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.				
Preliminary	First Production	This datasheet contains preliminary data; supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design.				
No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve the design.				
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild Semiconductor. The datasheet is printed for reference information only.				

Rev. 132

ON Semiconductor and in are trademarks of Semiconductor Components Industries, LLC dba ON Semiconductor or its subsidiaries in the United States and/or other countries. ON Semiconductor owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property. A listing of ON Semiconductor's product/patent coverage may be accessed at www.onsemi.com/site/pdt/Patent-Marking.pdf. ON Semiconductor reserves the right to make changes without further notice to any products herein. ON Semiconductor assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. Buyer is responsible for its products and applications using ON Semiconductor products, including compliance with all laws, regulations and safety requirements or standards, regardless of any support or applications information provided by ON Semiconductor. "Typical" parameters which may be provided in ON Semiconductor data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. ON Semiconductor does not convey any license under its patent rights nor the rights of others. ON Semiconductor products are not designed, intended, or authorized for use as a critical component in life support systems or any FDA Class 3 medical devices or medical devices with a same or similar classification in a foreign jurisdiction or any devices intended for implantation in the human body. Should Buyer purchase or use ON Semiconductor products for any such unintended or unauthorized application, Buyer shall indemnify and hold ON Semiconductor and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and exp

PUBLICATION ORDERING INFORMATION

LITERATURE FULFILLMENT:

Literature Distribution Center for ON Semiconductor 19521 E. 32nd Pkwy, Aurora, Colorado 80011 USA Phone: 303-675-2175 or 800-344-3860 Toll Free USA/Canada Fax: 303-675-2176 or 800-344-3867 Toll Free USA/Canada Email: orderlit@onsemi.com N. American Technical Support: 800-282-9855 Toll Free USA/Canada
Europe, Middle East and Africa Technical Support:
Phone: 421 33 790 2910
Japan Customer Focus Center
Phone: 81-3-5817-1050

ON Semiconductor Website: www.onsemi.com

Order Literature: http://www.onsemi.com/orderlit

For additional information, please contact your local Sales Representative

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Fairchild Semiconductor: