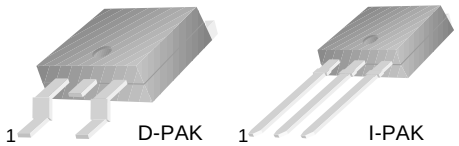
FAIRCHILD
SEMICONDUCTOR®

MJD32/32C

General Purpose Amplifier Low Speed Switching Applications
D-PAK for Surface Mount Applications

- Load Formed for Surface Mount Application (No Suffix)
- Straight Lead (I-PAK, "- I" Suffix)
- Electrically Similar to Popular TIP32 and TIP32C



1.Base 2.Collector 3.Emitter

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage : MJD32 : MJD32C	 - 40 - 100	 V V
V_{CEO}	Collector-Emitter Voltage : MJD32 : MJD32C	 - 40 - 100	 V V
V_{EBO}	Emitter-Base Voltage	- 5	V
I_C	Collector Current (DC)	- 3	A
I_{CP}	Collector Current (Pulse)	- 5	A
I_B	Base Current	- 1	A
P_C	Collector Dissipation (T_C=25°C)	15	W
	Collector Dissipation (T_a=25°C)	1.56	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 65 ~ 150	°C

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
V_{CEO}(sus)	* Collector-Emitter Sustaining Voltage : MJD32 : MJD32C	 I_C = - 30mA, I_B = 0	 -40 -100		 V V
I_{CEO}	Collector Cut-off Current : MJD32 : MJD32C	 V_{CE} = - 40V, I_B = 0 V_{CE} = - 60V, I_B = 0		 -50 -50	 μA μA
I_{CES}	Collector Cut-off Current : MJD32 : MJD32C	 V_{CE} = - 40V, V_{BE} = 0 V_{CE} = - 100V, V_{BE} = 0		 -20 -20	 μA μA
I_{EBO}	Emitter Cut-off Current	V_{BE} = - 5V, I_C = 0		-1	mA
h_{FE}	* DC Current Gain	V_{CE} = - 4V, I_C = - 1A V_{CE} = - 4V, I_C = - 3A	25 10	 50	
V_{CE}(sat)	* Collector-Emitter Saturation Voltage	I_C = - 3, I_B = - 375mA		-1.2	V
V_{BE}(on)	* Base-Emitter ON Voltage	V_{CE} = - 4A, I_C = - 3A		-1.8	V
f_T	Current Gain Bandwidth Product	V_{CE} = -10V, I_C = - 500mA	3		MHz

* Pulse Test: PW≤300μs, Duty Cycle≤2%

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Typical Characteristics

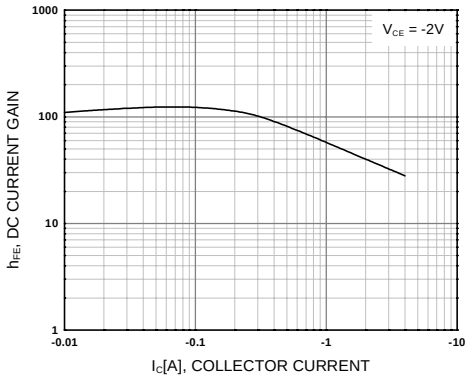

Figure 1. DC current Gain

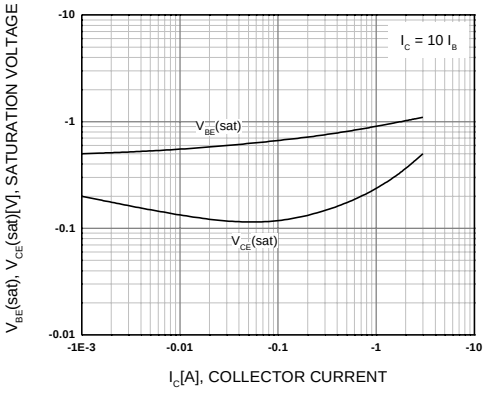

Figure 2. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

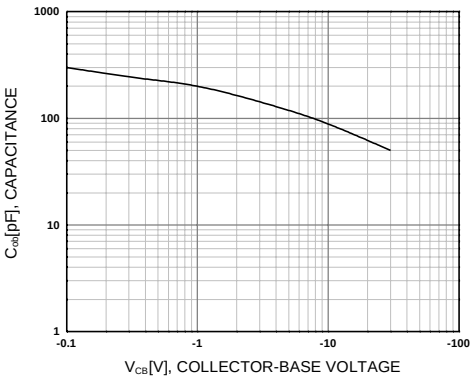

Figure 3. Collector Capacitance

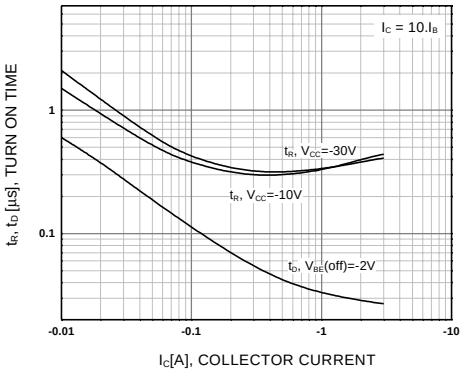

Figure 4. Turn On Time

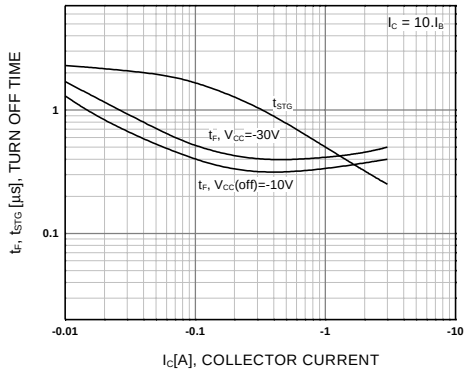

Figure 5. Turn Off Time

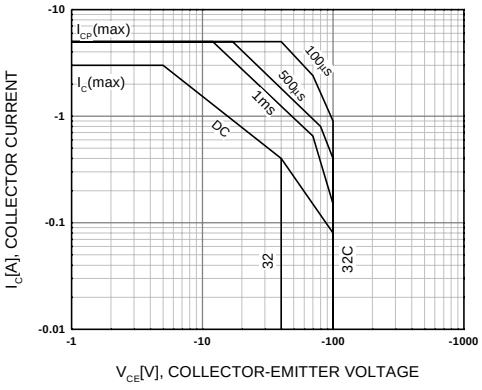

Figure 6. Safe Operating Area

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Typical Characteristics (Continued)

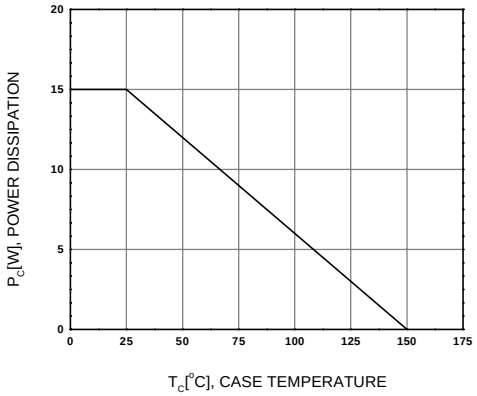

Figure 7. Power Derating

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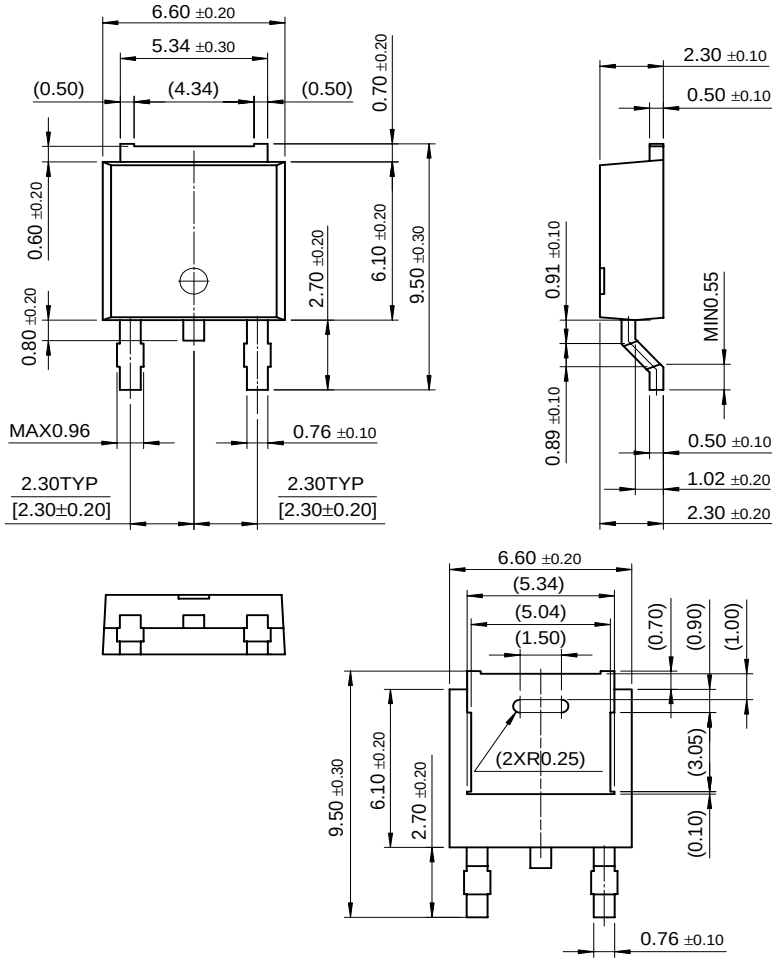
Package Demensions

D-PAK



Dimensions in Millimeters

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2. A critical component is 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, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order 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 in order to improve 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.

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MJD32C

PNP Epitaxial Silicon Transistor

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Features

General Purpose Amplifier
Low Speed Switching Applications
D-PAK for Surface Mount Applications

- Lead Formed for Surface Mount Applications (No Suffix)
- Straight Lead (I-PAK, "-I" Suffix)
- Electrically Similar to Popular TIP32 and TIP32C

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Product status/pricing/packaging

BUY

Product	Product status	Pb-free Status	Pricing*	Package type	Leads	Packing method	Package Marking Convention**
MJD32CTF	Full Production	Full Production	$0.364	TO-252(DPAK)	2	TAPE REEL	Line 1: **$Y** (Fairchild logo) &**Z** (Asm. Plant Code) &**4** (4-Digit Date Code) Line 3: MJD32C
MJD32CTF_SBDD002A	Full Production	Full Production	N/A	TO-252(DPAK)	2	TAPE REEL	Line 1: **$Y** (Fairchild logo) &**Z** (Asm. Plant Code) &**4** (4-Digit Date Code) Line 3: MJD32C

* Fairchild 1,000 piece Budgetary Pricing
** A sample button will appear if the part is available through Fairchild's on-line samples program. If there is no sample button, please contact a Fairchild distributor to obtain samples

 Indicates product with Pb-free second-level interconnect. For more information click here.

Package marking information for product MJD32C is available. Click here for more information .

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Models

Package & leads	Condition	Temperature range	Software version	Revision date
PSPICE				
TO-252(DPAK)-2	Electrical/Thermal	-25°C to 100°C	9.2	Mar 7, 2001

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Qualification Support

Click on a product for detailed qualification data

Product
MJD32CTF
MJD32CTF_SBDD002A

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