FJD3076TM Datasheet

https://www.DiGi-Electronics.com

DiGi Electronics Part Number	FJD3076TM-DG
Manufacturer	onsemi
Manufacturer Product Number	FJD3076TM
Description	TRANS NPN 32V 2A DPAK
Detailed Description	Bipolar (BJT) Transistor NPN 32 V 2 A 100MHz 1 W Surface Mount DPAK

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
FJD3076TM	onsemi
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
NPN	2 A
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
32 V	800mV @ 200mA, 2A
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
1µA (ICBO)	130 @ 500mA, 3V
Power - Max:	Frequency - Transition:
1 W	100MHz
Operating Temperature:	Mounting Type:
150°C (TJ)	Surface Mount
Package / Case:	Supplier Device Package:
TO-252-3, DPAK (2 Leads + Tab), SC-63	DPAK
Base Product Number:	
FJD3076	

Environmental & Export classification

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	
8541.29.0075	

Is Now Part of

ON Semiconductor®

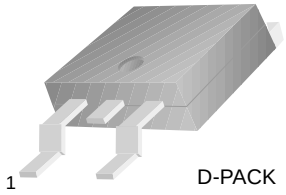
To learn more about ON Semiconductor, please visit our website at
www.onsemi.com

Please note: As part of the Fairchild Semiconductor integration, some of the Fairchild orderable part numbers will need to change in order to meet ON Semiconductor's system requirements. Since the ON Semiconductor product management systems do not have the ability to manage part nomenclature that utilizes an underscore (_), the underscore (_) in the Fairchild part numbers will be changed to a dash (-). This document may contain device numbers with an underscore (_). Please check the ON Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.onsemi.com. Please email any questions regarding the system integration to Fairchild_questions@onsemi.com.

FJD3076

Power Amplifier Applications

- Low Collector-Emitter Saturation Voltage



1

D-PACK

1. Base 2. Collector 3. Emitter

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	32	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	2	A
P_C	Collector Dissipation (T_a=25°C)	1	W
	Collector Dissipation (T_C=25°C)	10	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 55 ~ 150	°C

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = 1mA, I_B = 0	32			V
BV_{CBO}	Collector-Base Breakdown Voltage	I_C = 50μA	40			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = 50μA	5			V
I_{CBO}	Collector Cut-off Current	V_{CB} = 20V, I_E = 0			1	μA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 4V, I_C = 0			1	μA
h_{FE}	DC Current Gain	V_{CE} = 3V, I_C= 0.5A	130		390	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = 2A, I_B = 0.2A		0.5	0.8	V
f_T	Current Gain Bandwidth Product	V_{CE} = 5V, I_E = -0.5A, f = 100MHz		100		MHz
C_{ob}	Output Capacitance	V_{CB} = 10V, I_E = 0A, f = 1MHz		50		pF

Typical Characteristics

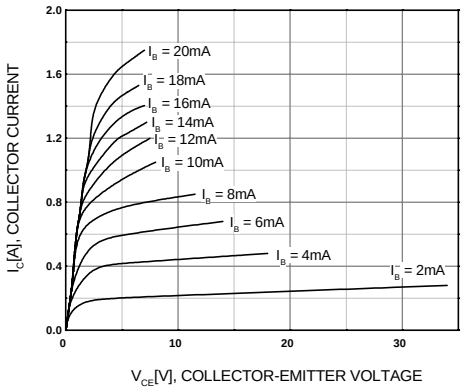


Figure 1. Static Characteristic

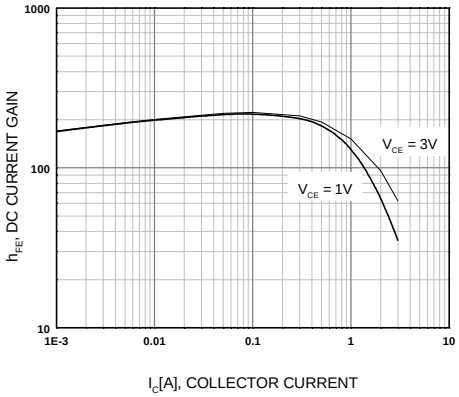


Figure 2. DC Current Gain

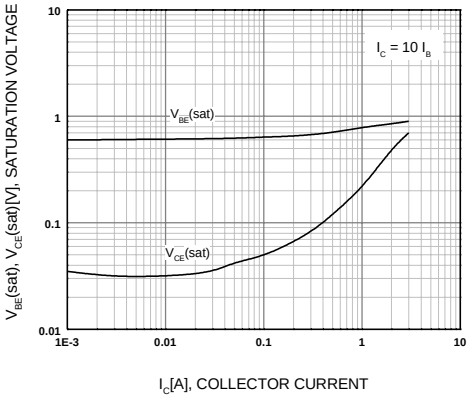


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

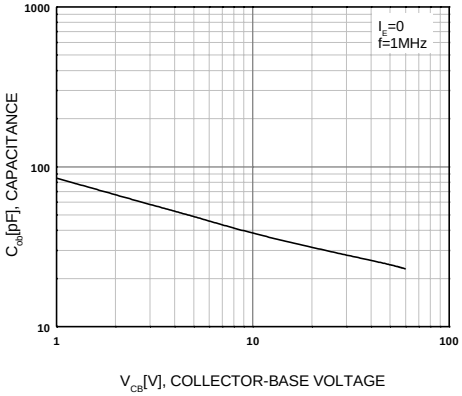


Figure 4. Collector Output Capacitance

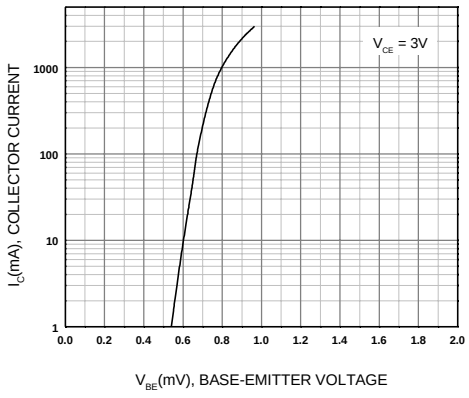


Figure 5. Base-Emitter On Voltage

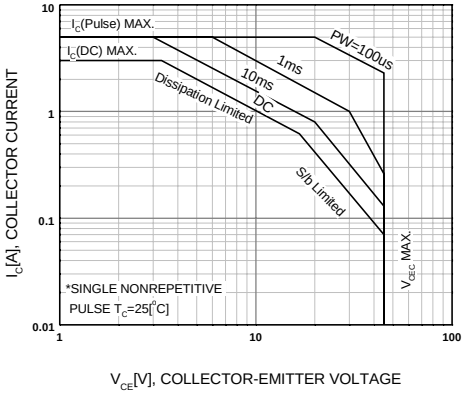
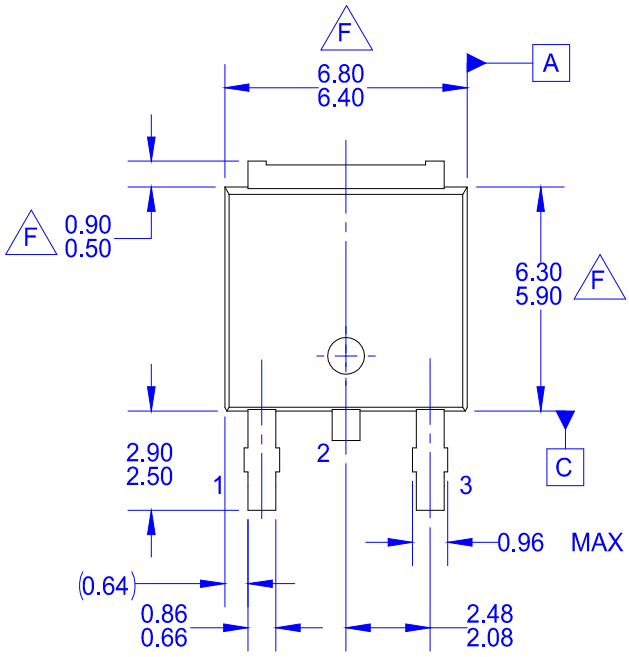
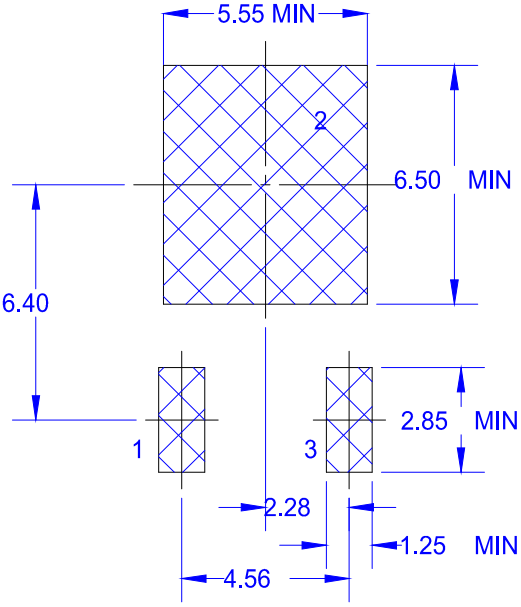
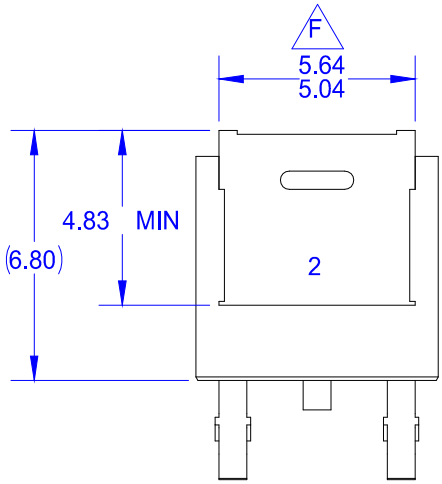


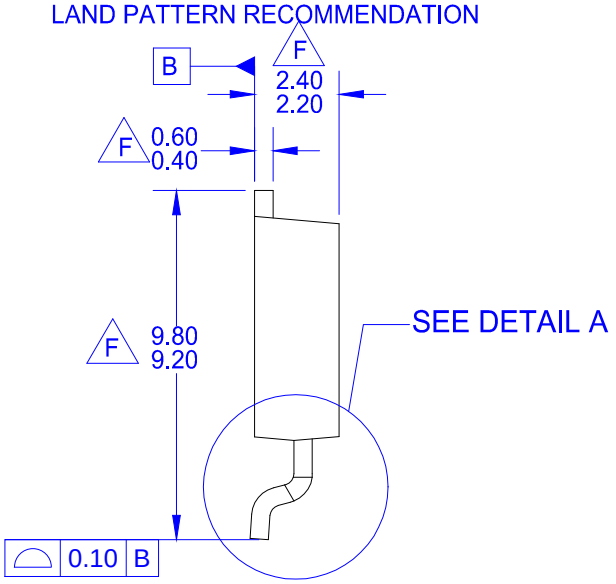
Figure 6. Safe Operating Area

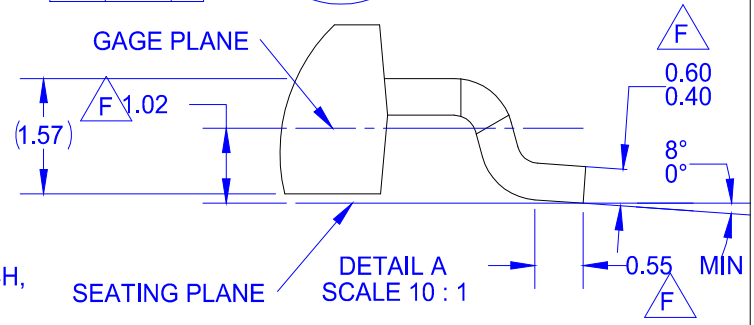




LAND PATTERN RECOMMENDATION







NOTES:UNLESS OTHERWISE SPECIFIED

A) NOT COMPLIANT TO JEDEC TO-252 VARIATION AB
B) ALL DIMENSION ARE IN MILLIMETER
C) DIMENSIONS ARE EXCLUSIVE OF BURRS,MOLD FLASH, AND TIE BAR EXTRUSIONS
D) LAD PATTERN PER IPC7351A ATANDARD TO228P991X239-3N
E) DRAWING FILE NAME:MKT-TO252D03REV4.
F) DOES NOT COMPLY JEDEC STANDARD VALUE.
G) FAIRCHILD SEMICONDUCTOR.

FAIRCHILD

PUBLICATION ORDERING INFORMATION

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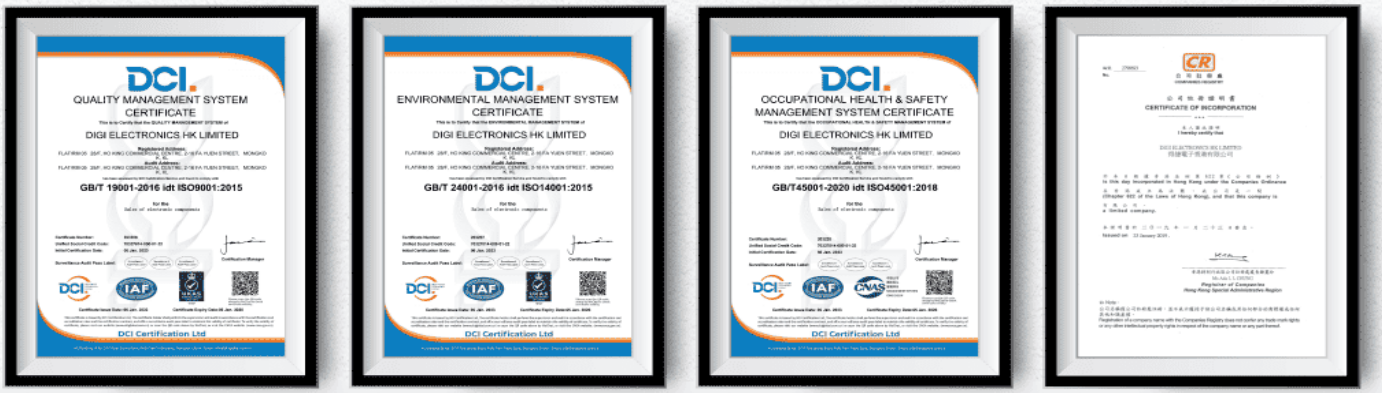

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