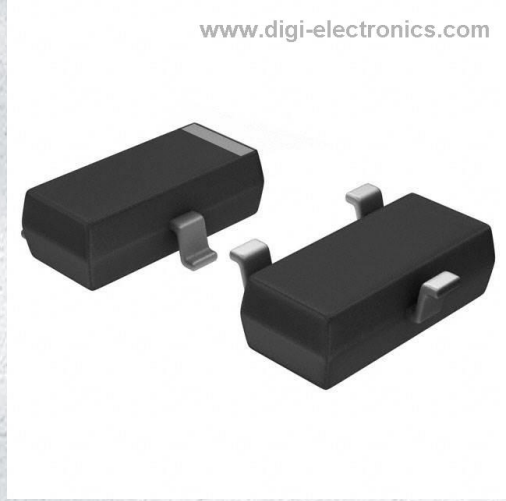
FJV992PMTF Datasheet



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DiGi Electronics Part Number	FJV992PMTF-DG
Manufacturer	onsemi
Manufacturer Product Number	FJV992PMTF
Description	TRANS PNP 120V 0.05A SOT23-3
Detailed Description	Bipolar (BJT) Transistor PNP 120 V 50 mA 50MHz 300 mW Surface Mount SOT-23-3

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
FJV992PMTF	onsemi
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
PNP	50 mA
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
120 V	300mV @ 1mA, 10mA
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
-	200 @ 1mA, 6V
Power - Max:	Frequency - Transition:
300 mW	50MHz
Operating Temperature:	Mounting Type:
150°C (TJ)	Surface Mount
Package / Case:	Supplier Device Package:
TO-236-3, SC-59, SOT-23-3	SOT-23-3
Base Product Number:	
FJV992	

Environmental & Export classification

Moisture Sensitivity Level (MSL):	REACH Status:
1 (Unlimited)	REACH Unaffected
ECCN:	HTSUS:
EAR99	8541.21.0095

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ON Semiconductor®

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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.

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FJV992

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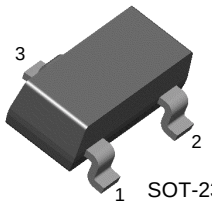
- Complement to FJV1845



SOT-23

1. Base 2. Emitter 3. Collector

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	-120	V
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-50	mA
P_C	Collector Power Dissipation	300	mW
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 ~ 150	°C

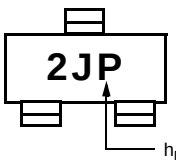
Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C = -100μA, I_E = 0	-120		V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = -1mA, I_B=0	-120		V
BV_{EBO}	Emitter-Emitter Breakdown Voltage	I_E = -10μA, I_C=0	-5		V
I_{EBO}	Emitter-Base Cutoff Current	V_{EB} = -6V, I_C=0		-30	nA
h_{FE1} h_{FE2}	DC Current Gain	V_{CE} = -6V, I_C= -0.1mA V_{CE} = -6V, I_C= -1mA	150 200	 800	
V_{CE} (sat)	Collector-Emitter Saturation Voltage	I_C = -10mA, I_B= -1mA		-300	mV
V_{BE} (on)	Base-Emitter On Voltage	V_{CE} = -6V, I_C= -1mA	-0.55	-0.65	V
f_T	Current Gain Bandwidth Product	V_{CE} = -6V, I_C= -1mA	50		MHz
C_{ob}	Output Capacitance	V_{CB} = -30V, I_E=0, f=1MHz		3	pF
NV	Noise Voltage	V_{CE} = -5.0V, I_C = -1.0mA, R_G =100KW, G_V = 80dB, f = 10Hz to 1.0KHz		40	mV

h_{FE2} Classification

Classification	P	F	E
h_{FE2}	200 ~ 400	300 ~ 600	400 ~ 800

Marking



h_{FE} Classification

Typical Characteristics

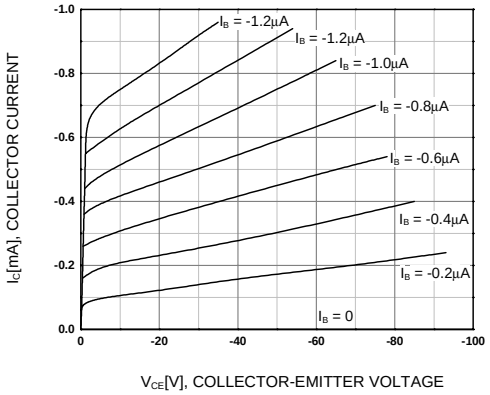


Figure 1. Static Characteristic

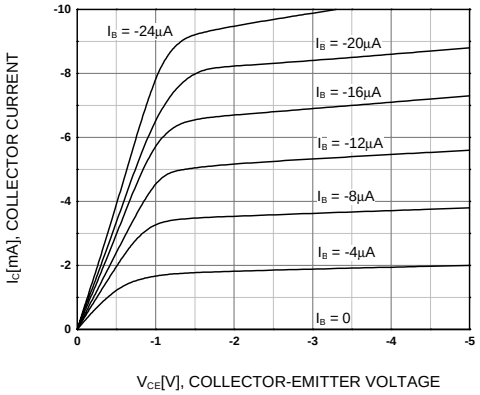


Figure 2. Static Characteristic

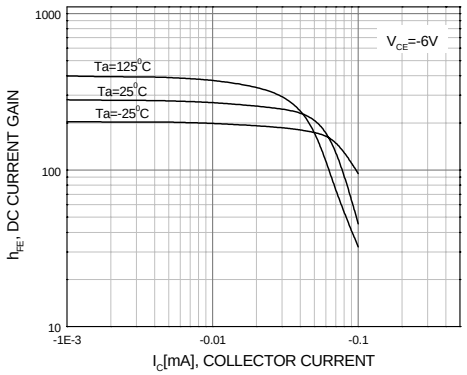


Figure 3. DC current Gain

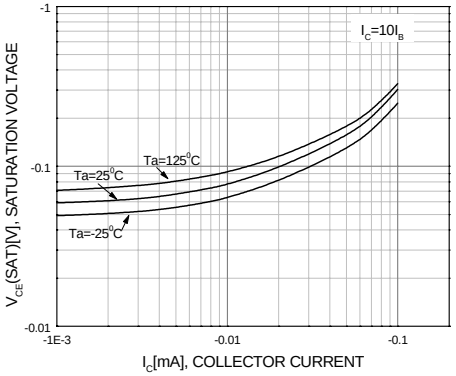


Figure 4. Collector-Emitter Saturation Voltage

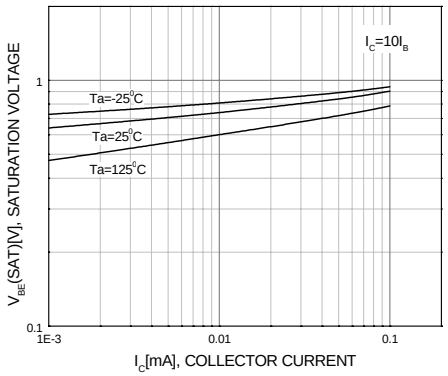


Figure 5. Base-Emitter Saturation Voltage

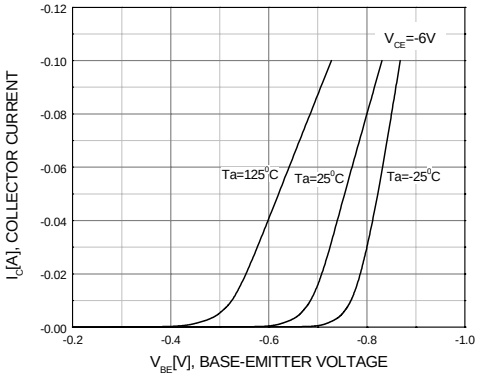


Figure 6. Base-Emitter Voltage

Typical Characteristics (Continued)

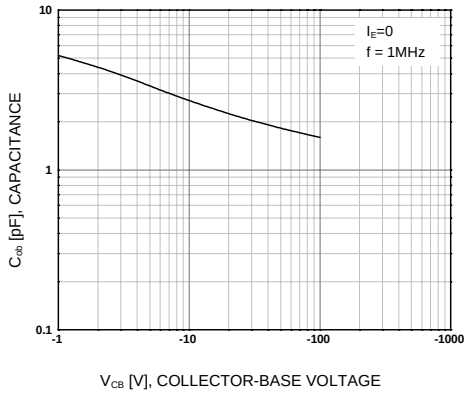


Figure 7. Collector Output Capacitance

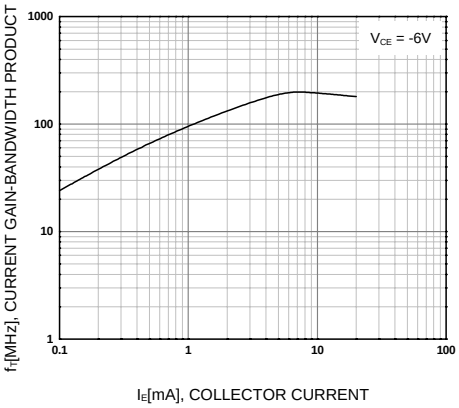


Figure 8. Current Gain Bandwidth Product

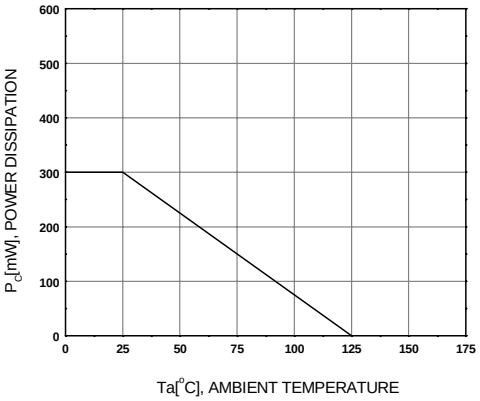
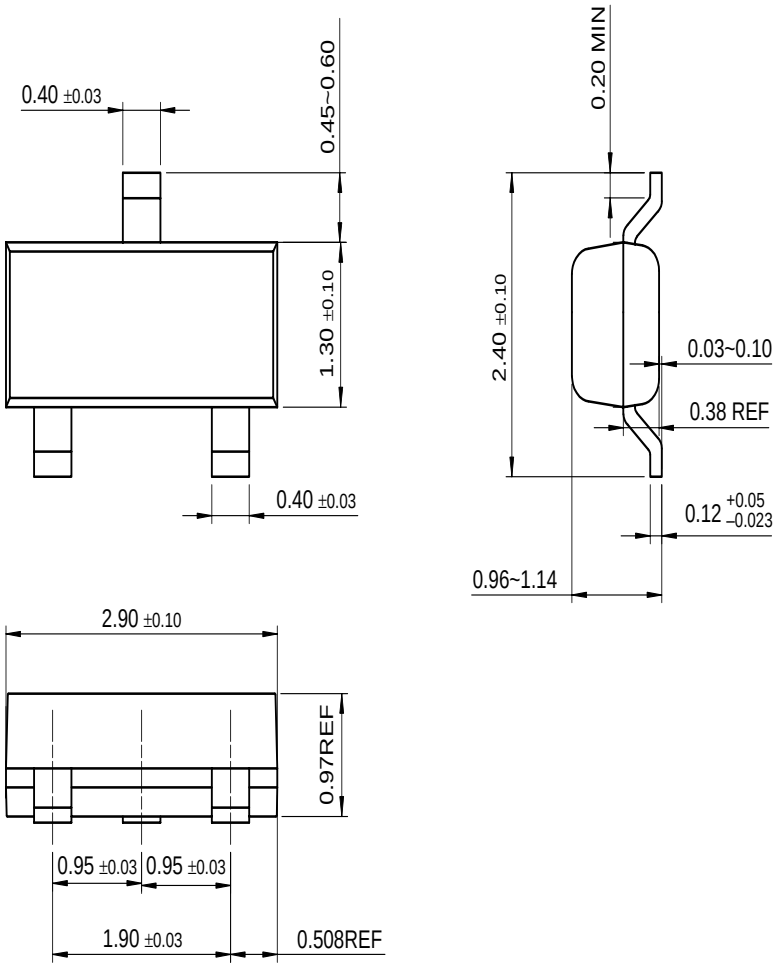


Figure 9. Power Derating

Package Dimensions

SOT-23



Dimensions in Millimeters

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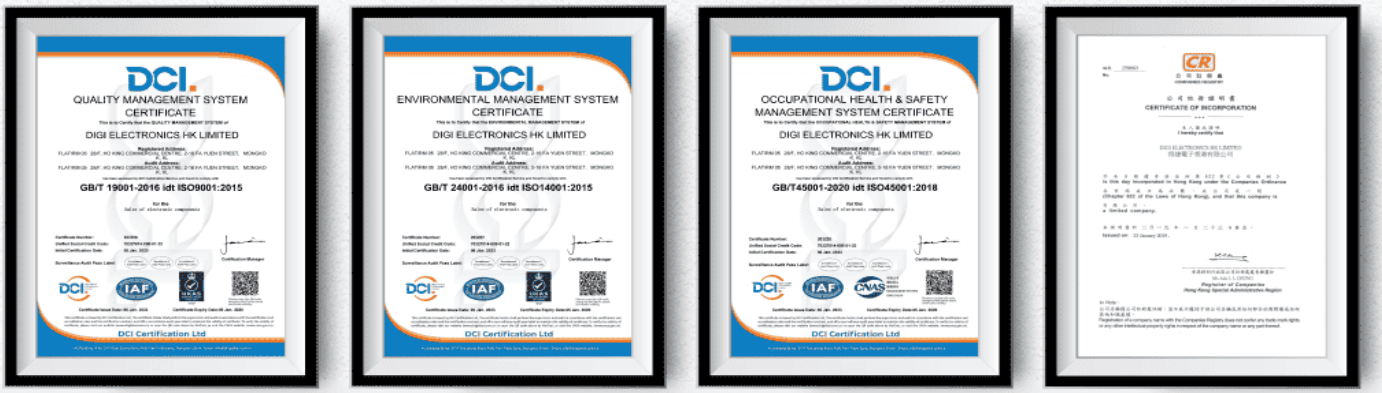

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