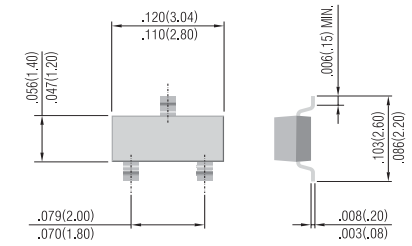
PANJIT SEMI CONDUCTOR

2SC2411K

NPN GENERAL PURPOSE SWITCHING TRANSISTOR

VOLTAGE 32 Volts **POWER** 225mW

SOT-23 Unit: inch (mm)



FEATURES

- NPN epitaxial silicon,planar design
- Collector-emitter voltage V_{CE}=32V
- Collector current IC=500mA
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

Case : SOT-23 plastic
Terminals : Solderable per MIL-STD-750, Method 2026
Approx Weight : 0.008 gram
Marking : 241

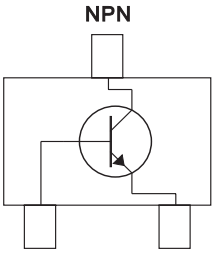


Fig.34

ABSOLUTE RATINGS (T_A=25°C)

Parameter	Symbol	Value	Units
Collector-Emitter Voltage	V_{CEO}	32	V
Collector-Base Voltage	V_{CBO}	40	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current Continuous	I_C	500	mA

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Max. Power Dissipation (Note 1)	P_{TOT}	225	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	°C/W
Junction Temperation	T_J	-55 to +150	°C
Storage Temperation	T_{STG}	-55 to +150	°C

NOTE : 1.Transistor mounted on FR-4 board 70 x 60 x 1mm

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ELECTRICAL CHARACTERISTICS(T_A=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=100 μA	40	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA	32	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=100μA	5	-	-	V
Collector Cutoff Current	I_{CBO}	V_{CB}=20V	-	-	1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V	-	-	1	μA
DC Current Gain (Note 2)	h_{FE}	V_{CE}=3V,I_C=100mA	120	-	390	-
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	I_C=500mA,I_B=50mA	-	-	0.6	V
Transition Frequency	f_T	V_{CE}=5V,I_E=-200mA, f=100MHz	-	250	-	MHz
Collector-Base Capacitance	Cob	V_{CB}=10V,I_E=0A,f=1MHz	-	6.5	-	pF

NOTE : 2.Pulse Test : Pulse width < 300μs, duty cycle < 2.0%

ELECTRICAL CHARACTERISTICS CURVE

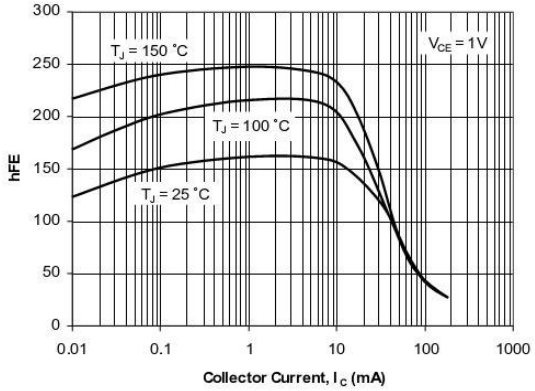

Fig. 1. Typical h_{FE} vs Collector Current

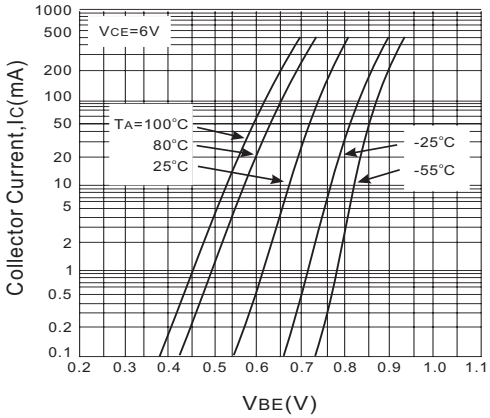

Fig.2.Typical VBE vs Collector Current

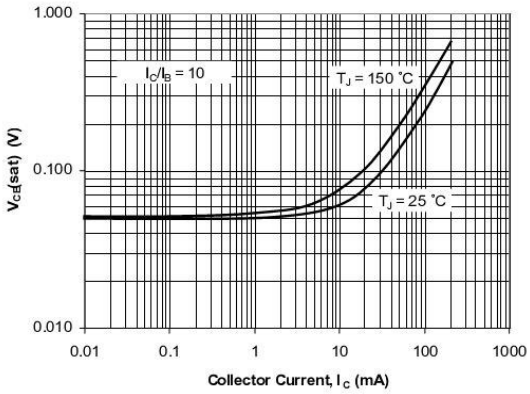

Fig. 3. Typical $V_{CE(SAT)}$ vs Collector Current

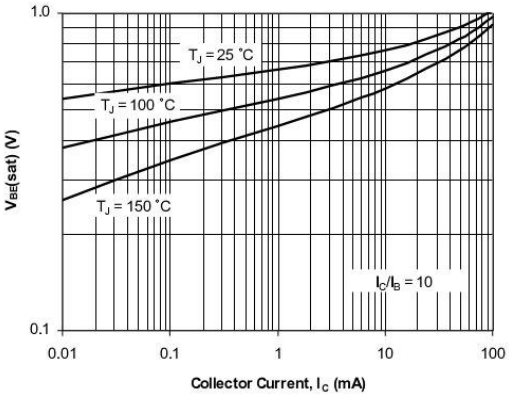

Fig. 4. Typical $V_{BE(SAT)}$ vs Collector Current

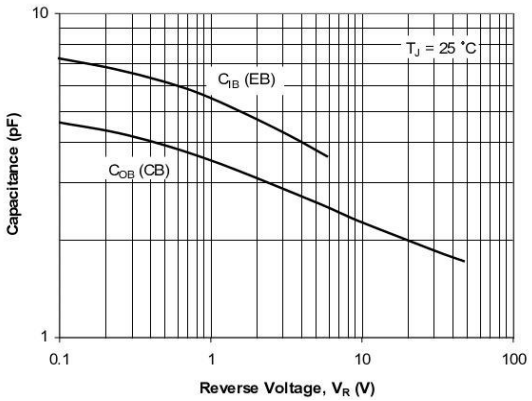

Fig. 5. Typical Capacitances vs Reverse Voltage

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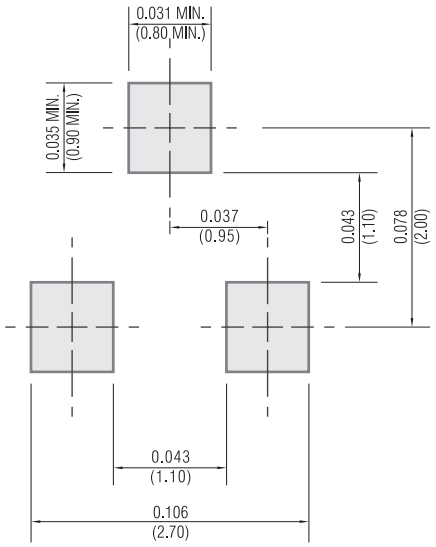
MOUNTING PAD LAYOUT

SOT-23 Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 12K per 13" plastic Reel

  T/R - 3K per 7” plastic Reel

LEGAL STATEMENT