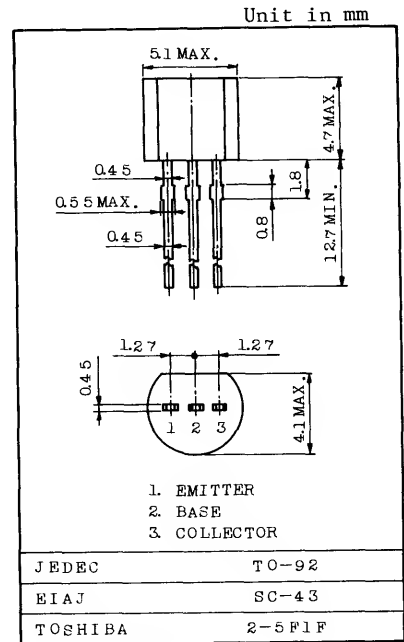


FOR GENERAL PURPOSE USE SWITCHING AND AMPLIFIER APPLICATIONS.

FEATURES:

- . Low Leakage Current
 - : $I_{CBO} = -50\text{nA}(\text{Max.}) @ V_{CB} = -20\text{V}$
 - : $I_{EBO} = -50\text{nA}(\text{Max.}) @ V_{EB} = -3\text{V}$
- . Low Saturation Voltage
 - : $V_{CE}(\text{sat}) = -0.4\text{V}(\text{Max.}) @ I_C = -50\text{mA}, I_B = -5\text{mA}$
- . Low Collector Output Capacitance
 - : $C_{ob} = 4.5\text{pF}(\text{Max.}) @ V_{CB} = -5\text{V}$
- . Complementary to 2N4123



MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Weight : 0.21g

CHARACTERISTIC	SYMBOL	RATING	UNIT
* Collector-Base Voltage	V_{CBO}	-30	V
* Collector-Emitter Voltage	V_{CEO}	-30	V
* Emitter-Base Voltage	V_{EBO}	-4	V
* Collector Current	I_C	-200	mA
Base Current	I_B	-50	mA
* Collector Power Dissipation ($T_a = 25^\circ\text{C}$) Derate Linearly 25°C	P_C	350	mW
		2.8	mW/ $^\circ\text{C}$
* Collector Power Dissipation ($T_c = 25^\circ\text{C}$) Derate Linearly 25°C	P_C	1.0	W
		8	mW/ $^\circ\text{C}$
* Thermal Resistance (Junction to Ambient)	$R_{th(j-a)}$	357	$^\circ\text{C}/\text{W}$
* Thermal Resistance (Junction to Case)	$R_{th(j-c)}$	125	$^\circ\text{C}/\text{W}$
* Junction Temperature	T_j	150	$^\circ\text{C}$
* Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$

*In accordance with JEDEC registration data.

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
* Collector Cut-off Current	ICBO	V _{CB} =-20V, I _E =0	-	-	-50	nA
* Emitter Cut-off Current	IEBO	V _{EB} =-3V, I _C =0	-	-	-50	nA
* Collector-Base Breakdown Voltage	V(BR)CBO	I _C =-10μA, I _E =0	-30	-	-	V
* Collector-Emitter Breakdown Voltage	V(BR)CEO	I _C =-1mA, I _B =0	-30	-	-	V
* Emitter-Base Breakdown Voltage	V(BR)EBO	I _E =-10μA, I _C =0	-4	-	-	V
* DC Current Gain	h _{FE} (1)	V _{CE} =-1V, I _C =-2mA	50	-	150	
	h _{FE} (2)	V _{CE} =-1V, I _C =-50mA	25	-	-	
* Collector-Emitter Saturation Voltage	V _{CE} (sat)	I _C =-50mA, I _B =-5mA	-	-	-0.4	V
* Base-Emitter Saturation Voltage	V _{BE} (sat)	I _C =-50mA, I _B =-5mA	-	-	-0.95	V
* Small Signal Forward Current Transfer Ratio	h _{fe}	V _{CE} =-20V, I _C =-10mA, f=100MHz	2.0	-	-	
* Transition Frequency	f _T	V _{CE} =-20V, I _C =-10mA, f=100MHz	200	-	-	MHz
* Collector Output Capacitance	C _{ob}	V _{CB} =-5V, I _E =0, f=1MHz	-	-	4.5	pF
* Input Capacitance	C _{ib}	V _{EB} =-0.5V, I _C =0, f=1MHz	-	-	10	pF
* Small Signal Current Gain	h _{fe}	V _{CE} =-10V, I _C =-2mA, f=1kHz	50	-	200	
* Noise Figure	NF	V _{CE} =-5V, I _C =-100μA R _g =1kΩ, f=10Hz ~ 15.7kHz	-	-	5	dB

* In accordance with JEDEC registration data.