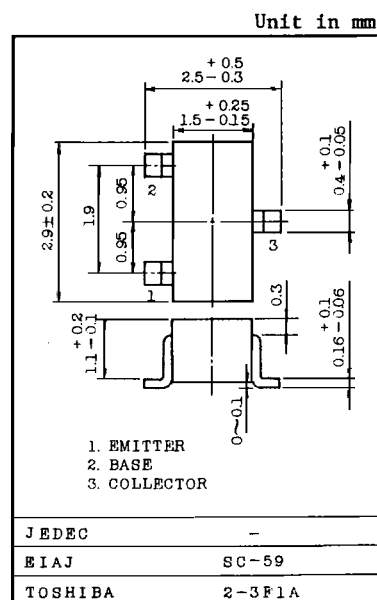


FOR GENERAL PURPOSE SWITCHING AND AMPLIFIER APPLICATIONS.

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
: $V_{CE(\text{sat})}=0.3\text{V}(\text{Max.})$ @ $I_C=50\text{mA}$, $I_B=5\text{mA}$
- Low Collector Output Capacitance
: $C_{ob}=4\text{pF}(\text{Max.})$ @ $V_{CB}=5\text{V}$
- Complementary to YTS4126



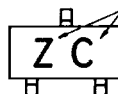
Weight: 0.012g

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	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	200	mW
		1.6	mW/ $^\circ\text{C}$
Thermal Resistance (Junction to Ambient)	$R_{th(j-a)}$	625	$^\circ\text{C/W}$
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	$-55 \sim 150$	$^\circ\text{C}$

Marking

Type Name



ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=20V, I_E=0$	-	-	50	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=3V, I_C=0$	-	-	50	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	40	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	30	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	5	-	-	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	$V_{CE(sat)}$	$I_C=50mA, I_B=5mA$	-	-	0.3	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}	$V_{CE}=20V, I_C=10mA$ $f=100MHz$	2.5	-	-	
Transition Frequency	f_T	$V_{CE}=20V, I_C=10mA$ $f=100MHz$	250	-	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=5V, I_E=0, f=1MHz$	-	-	4	pF
Input Capacitance	C_{ib}	$V_{EB}=0.5V, I_C=0, f=1MHz$	-	-	8	pF
Small Signal Current Gain	h_{fe}	$V_{CE}=10V, I_C=2mA, f=1kHz$	50	-	200	
Noise Figure	NF	$V_{CE}=5V, I_C=100\mu A$ $R_g=1k\Omega, f=10Hz \sim 15.7kHz$	-	-	6	dB