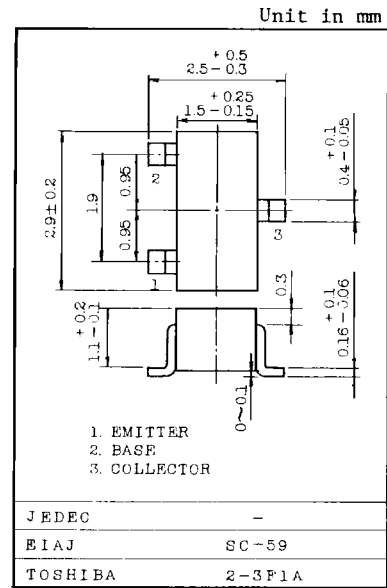


FOR GENERAL PURPOSE USE SWITCHING AND AMPLIFIER APPLICATIONS.

FEATURES:

- Low Leakage Current
: $I_{CEV}=100\text{nA}(\text{Max.})$, $I_{BEV}=-100\text{nA}(\text{Max.})$
@ $V_{CE}=35\text{V}$, $V_{BE}=-0.4\text{V}$
- Excellent DC Current Gain Linearity
- Low Saturation Voltage
: $V_{CE}(\text{sat})=0.4\text{V}(\text{Max.})$ @ $I_C=150\text{mA}$, $I_B=15\text{mA}$
- Low Collector Output Capacitance
: $C_{ob}=6.5\text{pF}(\text{Max.})$ @ $V_{CB}=5\text{V}$
- Complementary to YTS4403

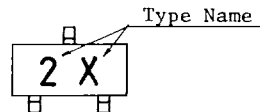


Weight: 0.012g

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	600	mA
Base Current	I_B	100	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	$^\circ\text{C}/\text{W}$
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ\text{C}$

Marking



ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		ICEV	VCE=35V, VBE=-0.4V	-	-	100	nA
Base Cut-off Current		IBEV	VCE=35V, VBE=-0.4V	-	-	-100	nA
Collector-Base Breakdown Voltage		V(BR)CBO	IC=0.1mA, IE=0	60	-	-	V
Collector-Emitter Breakdown Voltage		V(BR)CEO	IC=1mA, IB=0	40	-	-	V
Emitter-Base Breakdown Voltage		V(BR)EBO	IE=0.1mA, IC=0	6	-	-	V
DC Current Gain	hFE(1)		VCE=1V, IC=0.1mA	20	-	-	
	hFE(2)		VCE=1V, IC=1mA	40	-	-	
	hFE(3)		VCE=1V, IC=10mA	80	-	-	
	hFE(4)		VCE=1V, IC=150mA	100	-	300	
	hFE(5)		VCE=2V, IC=500mA	40	-	-	
Collector-Emitter Saturation Voltage	VCE(sat)1		IC=150mA, IB=15mA	-	-	0.4	V
	VCE(sat)2		IC=500mA, IB=50mA	-	-	0.75	V
Base-Emitter Saturation Voltage	VBE(sat)1		IC=150mA, IB=15mA	0.75	-	0.95	V
	VBE(sat)2		IC=500mA, IB=50mA	-	-	1.2	V
Transition Frequency		fT	VCE=10V, IC=20mA f=100MHz	250	-	-	MHz
Collector Output Capacitance		Cob	VCB=5V, IE=0, f=1MHz	-	-	6.5	pF
Input Capacitance		Cib	VEB=0.5V, IC=0, f=1MHz	-	-	30	pF
Input Impedance		hie	VCE=10V, IC=1mA f=1kHz	1.0	-	15	kΩ
Voltage Feedback Ratio		hre		0.1	-	8	×10 ⁻⁴
Small-Signal Current Gain		hfe		40	-	500	
Collector Output Admittance		hoe		1.0	-	30	μS
Switching Time	Delay Time	td		-	-	15	ns
	Rise Time	tr		-	-	20	
	Storage Time	tstg		-	-	225	
	Fall Time	tf		-	-	30	