Unit in mm

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL PLANAR TYPE

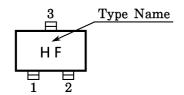
2 S C 3 1 2 4

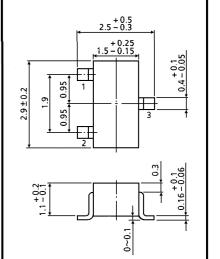
TV TUNER, VHF OSCILLATOR APPLICATIONS

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	v_{CBO}	30	V
Collector-Emitter Voltage	v_{CEO}	15	V
Emitter-Base Voltage	v_{EBO}	3	V
Collector Current	$I_{\mathbf{C}}$	50	mA
Base Current	$I_{\mathbf{B}}$	25	mA
Collector Power Dissipation	PC	150	mW
Junction Temperature	$T_{\rm j}$	125	°C
Storage Temperature Range	$T_{ m stg}$	-55~125	°C

Marking





1. BASE 2. EMITTER

JEDEC — EIAJ SC-59

3. COLLECTOR

2-3F1A

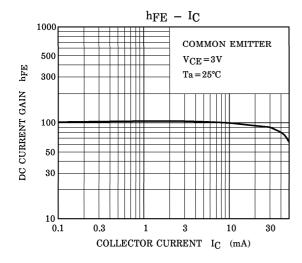
Weight: 0.012g

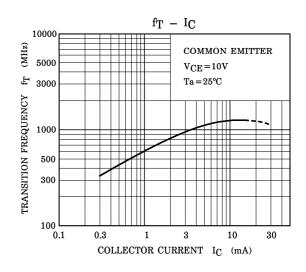
TOSHIBA

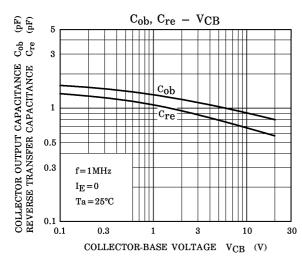
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

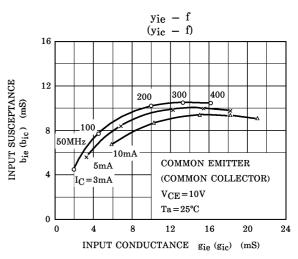
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 15V, I_{E} = 0$	_	_	0.1	μ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB}=3V, I_{C}=0$	_	_	1.0	μ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{\rm C}=1$ mA, $I_{\rm B}=0$	15	_	_	V
DC Current Gain	$h_{ ext{FE}}$	$V_{CE}=3V, I_{C}=8mA$	40	100	200	_
Transition Frequency	$ m f_{T}$	$V_{CE}=10V, I_{C}=8mA$	650	1100		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10V, I_{E} = 0, f = 1MHz$	_	0.9	1.3	pF
Collector-Base Time Constant	C _c . rbb'	$V_{\text{CB}} = 10\text{V}, I_{\text{C}} = 8\text{mA},$ f = 30MHz	_	7	12	ps

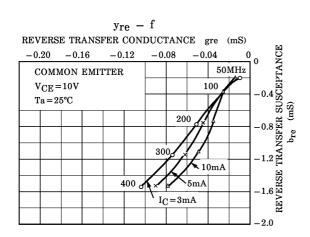
1 2001-05-31

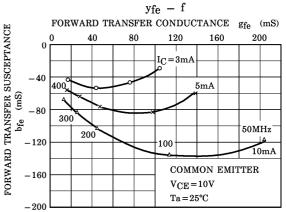




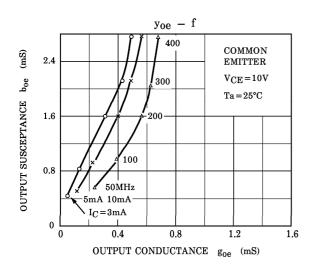


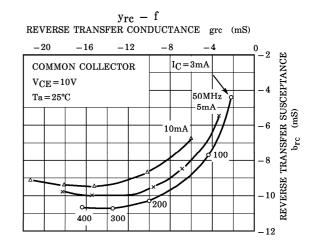


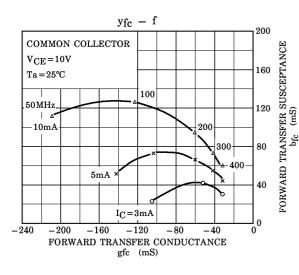


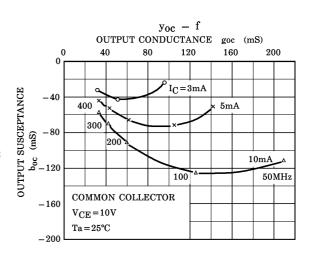


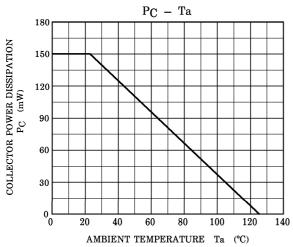
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3 2001-05-31

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