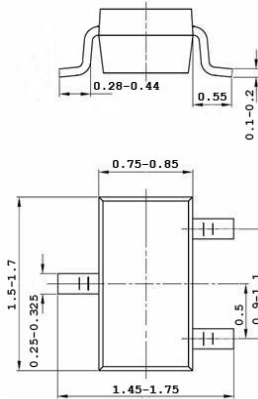
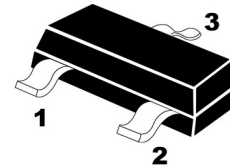


TRANSISTOR (PNP)
Plastic-Encapsulate Transistor
FEATURES

- Reduces Board Space
- High h_{FE} , 210 460 (typical)
- Low $V_{CE(sat)} < 0.5V$

Marking:FQ,FR,FS
SOT-523

1. BASE
2. EMITTER
3. COLLECTOR



UNIT:mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

MAXIMUM RATINGS

Parameter	Symbol	Value	UNITS
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-6.0	V
Collector Current – Continuous	I_C	-100	mA
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55-150	°C

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -50\mu A, I_E = 0$	-60			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1.0mA, I_B = 0$	-50			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -50\mu A, I_C = 0$	-6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -30V, I_E = 0$			-0.5	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = -5.0V, I_C = 0$			-0.5	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -6.0V, I_C = -1.0mA$	120		560	
Collector-Emitter Saturation Voltage ⁽¹⁾	$V_{CE(sat)}$	$I_C = -50mA, I_B = -5.0mA$			-0.5	V
Transition Frequency	f_T	$V_{CE} = -12V, I_C = -2.0mA, f = 30MHz$		140		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -12V, I_E = 0, f = 1MHz$		3.5		pF

⁽¹⁾ Pulse Test: Pulse Width $\leq 300\mu S$, D.C $\leq 2\%$

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