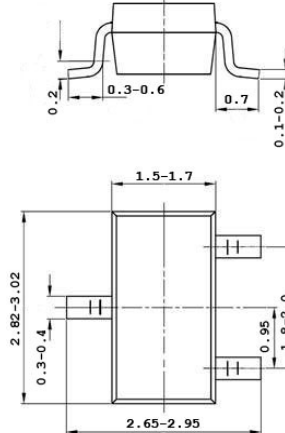
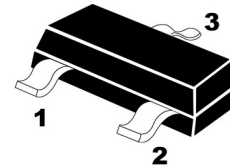


TRANSISTOR (PNP)
Plastic-Encapsulate Transistor
FEATURES

- Excellent h_{FE} linearity
- Complements the 2SC2412K

MARKING: FQ, FR, FS
SOT-23-3L

1. BASE
2. EMITTER
3. COLLECTOR



Unit:mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

MAXIMUM RATINGS

Parameters	Symbols	Value	UNITS
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current - Continuous	I_C	150	mA
Collector Dissipation	P_C	200	mW
Junction and Storage Temperature	T_J, T_{stg}	-55-150	°C

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

ELECTRICAL CHARACTERISTICS

Parameters	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	$V_{(BR)CEO}$	$I_C = -1\mu A, I_B = 0$	-50			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -50\mu A, I_C = 0$	-6			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -60V, I_E = 0$			-0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = -6V, I_C = 0$			-0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = -6V, I_C = -1mA$	120		560	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -50mA, I_B = -5mA$			-0.5	V
Transition Frequency	f_T	$V_{CE} = -12V, I_C = -2mA, f = 30MHz$		140		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -12V, I_E = 0, f = 1MHz$		4.0	5.0	pF

CLASSIFICATION OF h_{FE}

Rank	Q	R	S
Range	120-270	180-390	270-560

www.s-manuals.com