

TRANSISTOR (PNP)
Plastic-Encapsulate Transistor
FEATURES

Power dissipation

$$P_{CM} : 0.625W \text{ (Tamb=25°C)}$$

Collector current

$$I_{CM} : -1.5A$$

Collector-base Voltage

$$V_{(BR)CBO} : -40 V$$

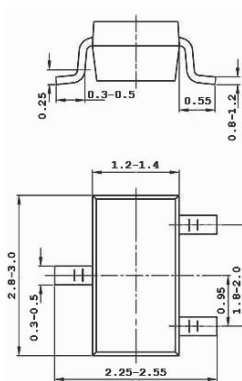
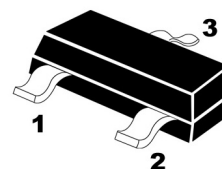
Operating and storage junction temperature range

$$T_J, T_{stg} : -55^{\circ}C \text{ to } +150^{\circ}C$$

MARKING:Y2D

SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



Unit:mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ELECTRICAL CHARACTERISTICS

Parameters	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu A, I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -0.1mA, I_B = 0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100 \mu A, I_C = 0$	-6		V
Collector cut-off current	I_{CBO}	$V_{CB} = -40V, I_E = 0$		-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -20V, I_B = 0$		-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0 \text{ mA}$		-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -100mA$	120	350	
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -800mA$	40		
Collector-emitter saturation voltage	V_{CEsat}	$I_C = -800mA, I_B = -80mA$		-0.5	V
Base-emitter saturation voltage	V_{BEsat}	$I_C = -800mA, I_B = -80mA$		-1.2	V
Base-emitter voltage	V_{BEF}	$I_E = -1.5A$		-1.6	V
Transition frequency	f_r	$V_{CE} = -10V, I_C = -50mA, f = 30MHz$	100		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	C	D
Range	120-200	200-350