PUA3228

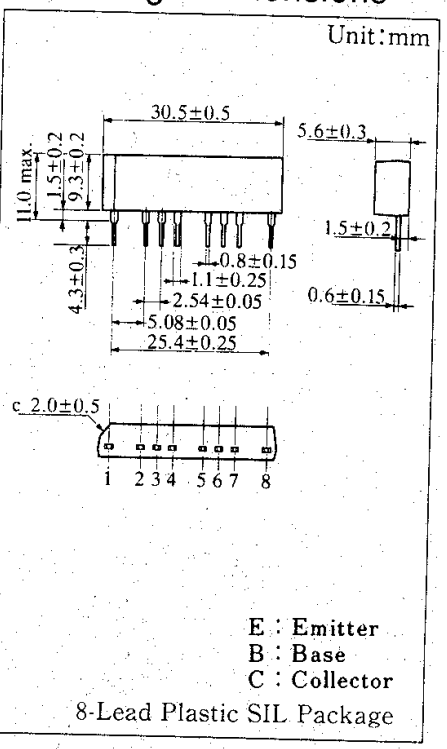
Silicon NPN Epitaxial Planar Type

Power Amplifier

■ Features

- Low collector-emitter saturation voltage ($V_{CE(sat)}$)
- Good linearity of (h_{FE})
- High collector current (I_C)
- 3 PNP elements

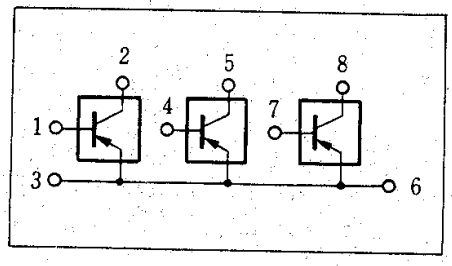
■ Package Dimensions



■ Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Value	Unit
Collector-base voltage	V_{CBO}	−30	V
Collector-emitter voltage	V_{CEO}	−30	V
Emitter-base voltage	V_{EBO}	−6	V
Peak collector current	I_{CP}	−4	A
Collector current	I_C	−2	A
Power dissipation	P_C	20	W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	−55～+150	℃

■ Inner Circuit



■ Electrical Characteristics (Tc=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	I_{CES}	V_{CE}=−30V, V_{BE}=0			−100	μA
Collector cutoff current	I_{CEO}	V_{CE}=−15V, I_B=0			−100	μA
Emitter cutoff current	I_{EBO}	V_{EB}=−6V, I_C=0			−50	μA
Collector-emitter voltage	V_{CEO}	I_C=−30mA, I_B=0	−30			V
DC current gain	h_{FE}	V_{CE}=−4V, I_C=−0.1A	35			
		V_{CE}=−4V, I_C=−1A	80		280	
Base-emitter voltage	V_{BE}	V_{CE}=−4V, I_C=−1A			−1.2	V
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=−1A, I_B=−0.1A			−0.8	V
Transition frequency	f_T	V_{CE}=−10V, I_C=−0.1A, f=10MHz		80		MHz
Turn-on time	t_{on}	I_C=−1A I_{B1}=−0.1A, I_{B2}=0.1A V_{CC}=−20V		0.1		μs
Storage time	t_{stg}			1.3		μs
Collector current fall time	t_f			0.3		μs