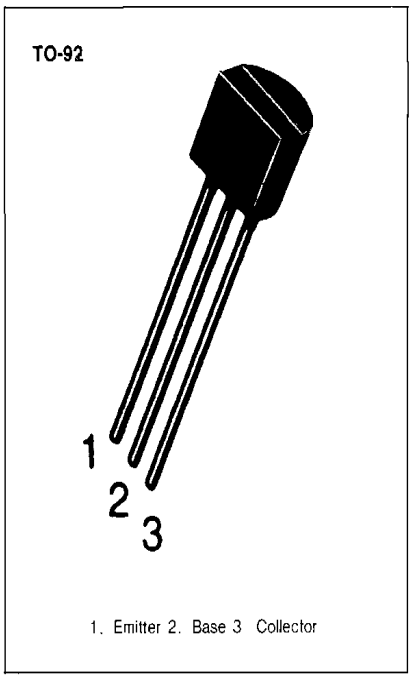
Transistors
USP05

USHA (INDIA) LTD

AMPLIFIER TRANSISTOR

- **Collector Dissipation: P_C (max)=625mW**



ABSOLUTE MAXIMUM RATINGS (T_a =25°C)

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	4	V
Collector Current	I_C	500	mA
Collector Dissipation	P_C	625	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	−55~150	°C

ELECTRICAL CHARACTERISTICS (T_a =25°C)

Characteristic	Symbol	Test Condition	Min	Max	Unit
*Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C = 1mA, I_B = 0	60		V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E = 100μA, I_C = 0	4		V
Collector Cut-off Current	I_{CBO}	V_{CB} = 60V, I_E = 0		0.1	μA
Collector Cut-off Current	I_{CEO}	V_{CE} = 60V, I_B = 0V		0.1	μA
DC Current Gain	h_{FE}	V_{CE} = 1V, I_C = 10mA	50		
		V_{CE} = 1V, I_C = 100mA	50		
Collector-Emitter Saturation Voltage	V_{CE}(sat)	I_C = 100mA, I_B = 10mA		0.25	V
Base-Emitter On Voltage	V_{BE}(on)	V_{CE} = 1V, I_C = 100mA		1.2	V
Current Gain Bandwidth Product	f_T	V_{CE} = 2V, I_C = 10mA, f = 100MHz	100		MHz

* Pulse Test: PW ≤ 300μs, Duty Cycle ≤ 2%

ISO 14001 CERTIFIED
AN ISO 9002 COMPANY