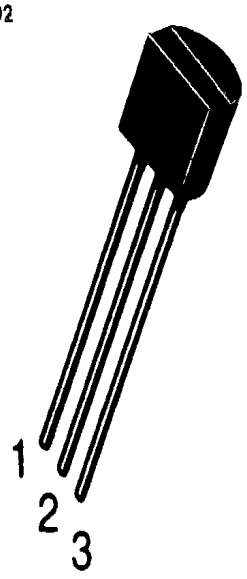
Transistors
2SC388

USHA (INDIA) LTD

TV FINAL PICTURE IF AMPLIFIER APPLICATIONS

- G_{Pe}=33dB (Typ) (f=45MHz)

TO-92



1. Emitter 2. Base 3. Collector

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

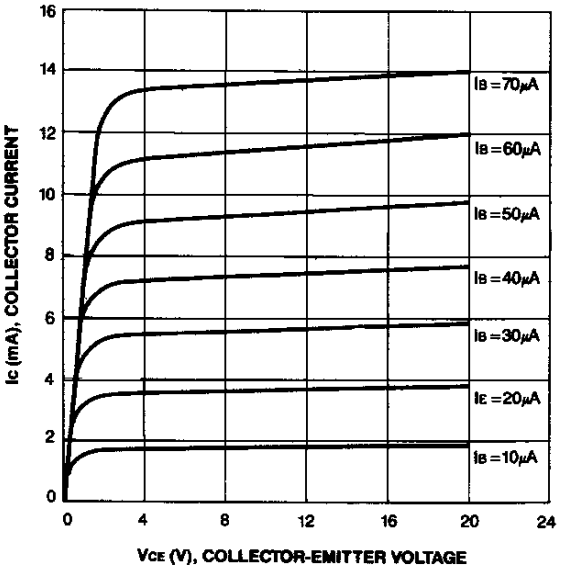
Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	4	V
Collector Current	I_C	50	mA
Collector Dissipation	P_C	300	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55~150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C)

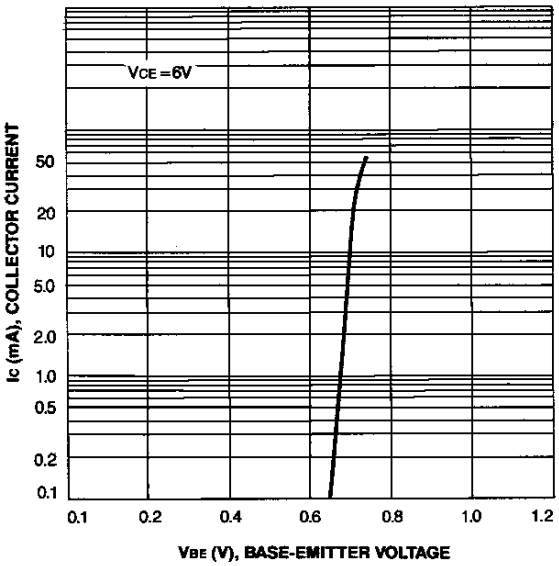
Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=10μA, I_E=0	30			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=5mA, I_B=0	25			V
Collector Cut-off Current	I_{CBO}	V_{CB}=30V, I_E=0			0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=3V, I_C=0			0.1	μA
DC Current Gain	h_{FE}	V_{CE}=12.5V, I_C=12.5mA	20		200	
Collector-Emitter Saturation Voltage	V_{CE} (sat)	I_C=15mA, I_B=1.5mA			0.2	V
Base-Emitter Saturation Voltage	V_{BE} (sat)	I_C=15mA, I_B=1.5mA			1.5	V
Output Capacitance	Cob	V_{CB}=10V, I_E=0, f=1MHz	0.8		2	pF
Collector-Base Time Constant	Cc·rbb′	V_{CB}=10V, I_E=−1mA f=30MHz			25	ps
Current Gain-Bandwidth Product	f_T	V_{CE}=12.5V, I_C=12.5mA	300			MHz
Power Gain	Gpe	V_{CC}=12.5V, f=45MHz I_E=−12.5mA	28		36	dB

ISO 14001 CERTIFIED
AN ISO 9002 COMPANY

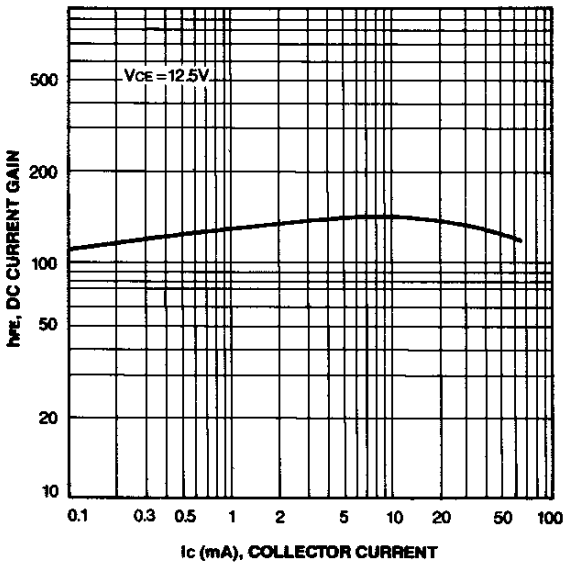
STATIC CHARACTERISTIC



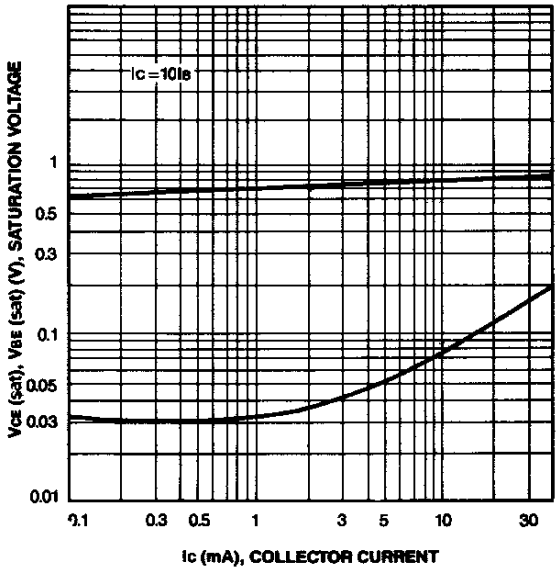
BASE-EMITTER ON VOLTAGE



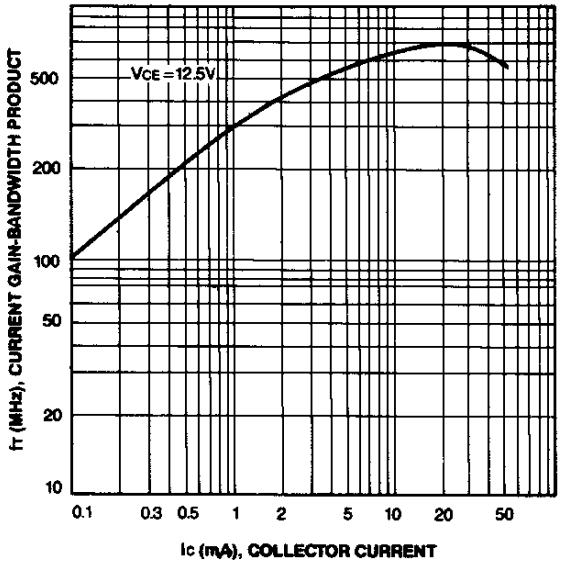
DC CURRENT GAIN



BASE-EMITTER SATURATION VOLTAGE COLLECTOR-EMITTER SATURATION VOLTAGE



CURRENT GAIN-BANDWIDTH PRODUCT



COLLECTOR INPUT CAPACITANCE COLLECTOR OUTPUT CAPACITANCE

