2SC4358 (Preliminary)

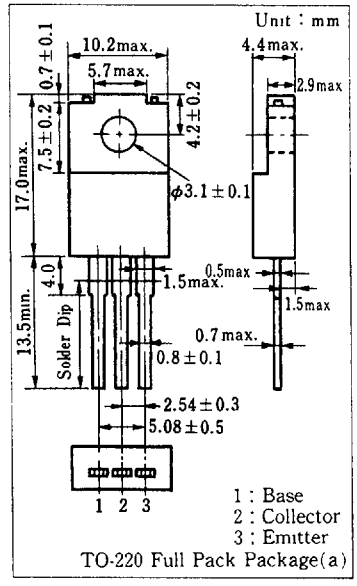
Silicon NPN Epitaxial Planar Type

Video Output

■ Feature

- High transition frequency (f_T)

■ Package Dimensions



■ Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Value	Unit
Collector-base voltage	V_{CBO}	35	V
Collector-emitter voltage	V_{CEO}	25	V
Emitter-base voltage	V_{EBO}	4	V
Peak collector current	I_{CP}	500	mA
Collector current	I_C	300	mA
Collector power dissipation (Tc=25°C)	P_C	2.0	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 ~ +150	°C

■ Electrical Characteristics (Tc=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Emitter cutoff current	I_{EBO}	V_{EB}=3V, I_C=0			10	μA
Collector-base voltage	V_{CBO}	I_C=100μA, I_E=0	35			V
Collector-emitter voltage	V_{CEO}	I_C=1mA, I_B=0	25			V
DC current gain	h_{FE}	V_{CE}=10V, I_C=50mA	40		200	
Base-emitter voltage	V_{EBO}	I_E=100μA, I_B=0	4			V
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=50mA, I_B=5mA			0.4	V
Transition frequency	f_T	V_{CE}=10V, I_C=50mA, f=800MHz	2.0	2.5		GHz
Collector output capacitance	C_{ob}	V_{CB}=30V, I_E=0, f=1MHz		2.6		pF
Transient thermal resistance	$R_{th(j-c)}$				15.0	°C/W