

SANYO

No.2557A

2SC4188

NPN Epitaxial Planar Silicon Transistor

**Ultrahigh-Definition CRT Display
Video Output Applications****Features**

- High breakdown voltage : $V_{CEO} \geq 200V$
- Small reverse transfer capacitance and excellent high frequency characteristic : $c_{re} = 1.3pF$ typ
- Adoption of FBET process

Absolute Maximum Ratings at $T_a = 25^\circ C$

			unit
Collector-to-Base Voltage	V_{CBO}	200	V
Collector-to-Emitter Voltage	V_{CEO}	200	V
Emitter-to-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA
Collector Current (Pulse)	I_{CP}	200	mA
Collector Dissipation	P_C	1.5	W
		10	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

 $T_c = 25^\circ C$ **Electrical Characteristics at $T_a = 25^\circ C$**

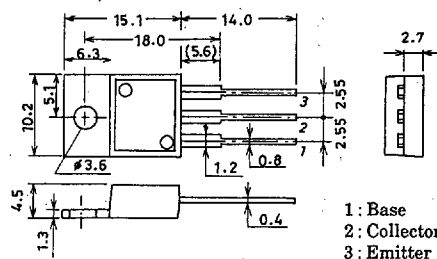
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 150V, I_E = 0$			0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V, I_C = 0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = 10V, I_C = 10mA$	≈ 40		≈ 320	
Gain-Bandwidth Product	f_T	$V_{CE} = 30V, I_C = 10mA$		150		MHz
Output Capacitance	C_{ob}	$V_{CB} = 30V, f = 1MHz$		1.8		pF
Reverse Transfer Capacitance	C_{re}	$V_{CB} = 30V, f = 1MHz$		1.3		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 20mA, I_B = 2mA$			0.6	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 20mA, I_B = 2mA$			1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	200			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1mA, R_{BE} = \infty$	200			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	5			V

The 2SC4188 is classified by 10mA h_{FE} as follows :

40	C	80	60	D	120	100	E	200	160	F	320
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Package Dimensions 2010C

(unit : mm)



1: Base
2: Collector
3: Emitter

JEDEC: TO220AB
EIAJ : SC46

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