

ISA2188AM1

FOR GENERAL PURPOSE HIGH CURRENT DRIVE APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

ISA2188AM1 is a silicon PNP epitaxial type transistor
Designed with high collector current, low $V_{CE(sat)}$.

FEATURE

- High collector current

$$I_{C(MAX)} = -650\text{mA}$$

- Low collector to emitter saturation voltage

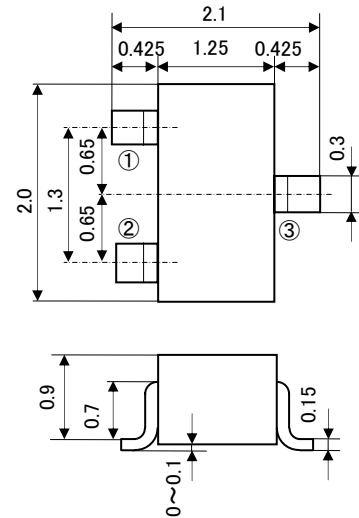
$$V_{CE(sat)} < -0.7V_{max}$$

APPLICATION

For switching application, small type motor drive application.

OUTLINE DRAWING

Unit: mm



TERMINAL CONNECTOR

①: BASE

②: EMITTER

③: COLLECTOR

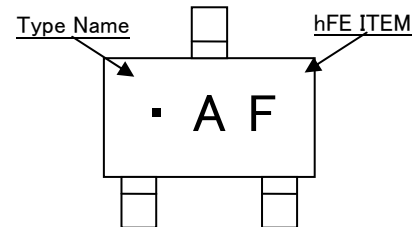
JEITA: SC-70

JEDEC: —

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

Symbol	Parameter	Ratings	Unit
V_{CEO}	Collector to Emitter voltage	-20	V
V_{CBO}	Collector to Base voltage	-25	V
V_{EBO}	Emitter to Base voltage	-4	V
I_{CM}	Peak collector current	-1000	mA
I_C	Collector current	-650	mA
P_C	Collector dissipation	200	mW
T_j	Junction temperature	150	$^\circ\text{C}$
T_{stg}	Storage temperature	-55~150	$^\circ\text{C}$

MARKING



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

Symbol	Parameter	Test condition	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CEO}$	C to E break down voltage	$I_C = -100\mu\text{A}, I_B = 0$	-20			V
$V_{(BR)CBO}$	C to B break down voltage	$I_C = -10\mu\text{A}, I_E = 0$	-25			V
$V_{(BR)EBO}$	E to B break down voltage	$I_E = -10\mu\text{A}, I_C = 0$	-4			V
I_{CBO}	Collector cut off current	$V_{CB} = -25\text{V}, I_E = 0$			-1	μA
I_{EBO}	Emitter cut off current	$V_{EB} = -2\text{V}, I_C = 0$			-1	μA
$h_{FE} \times$	DC forward current gain	$I_C = -100\text{mA}, V_{CE} = -4\text{V}$	150		800	-
$V_{CE(sat)}$	C to E saturation voltage	$I_C = -500\text{mA}, I_B = -25\text{mA}$		-0.3	-0.7	V
f_T	Gain band width product	$I_E = 10\text{mA}, V_{CE} = -6\text{V}, f = 100\text{MHz}$		210		MHz

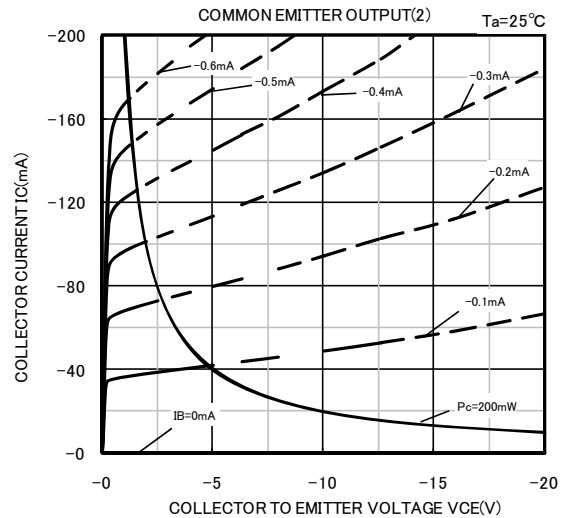
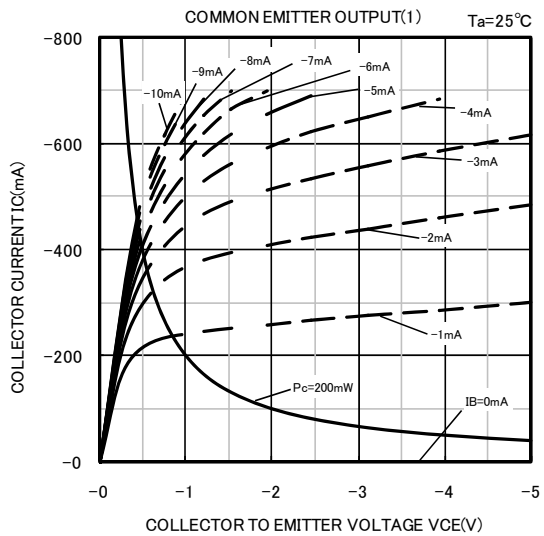
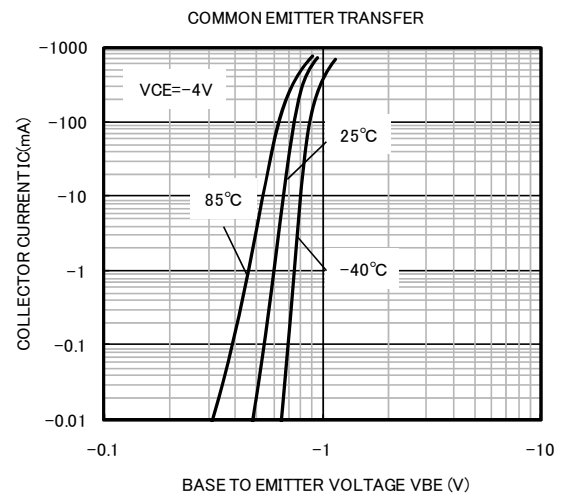
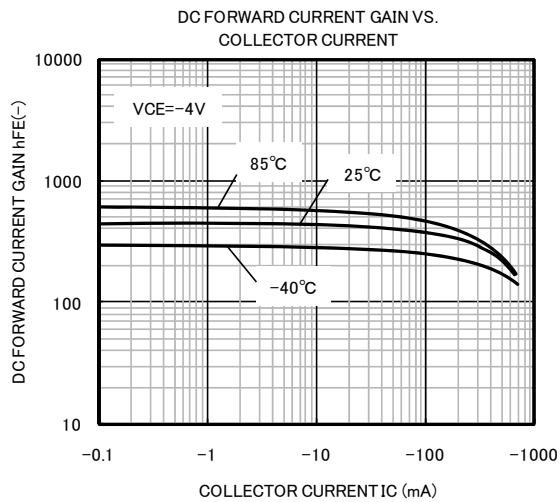
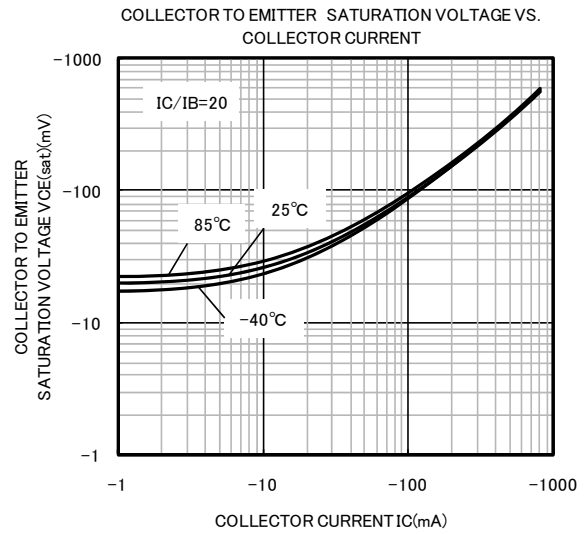
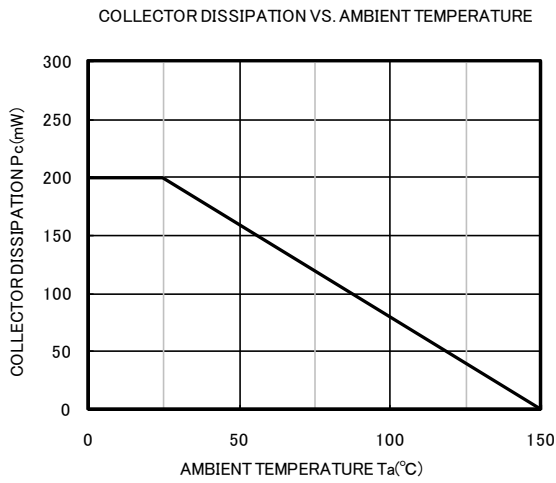
*: It shows hFE classification in below table.

ITEM	E	F	G
hFE	150~300	250~500	400~800

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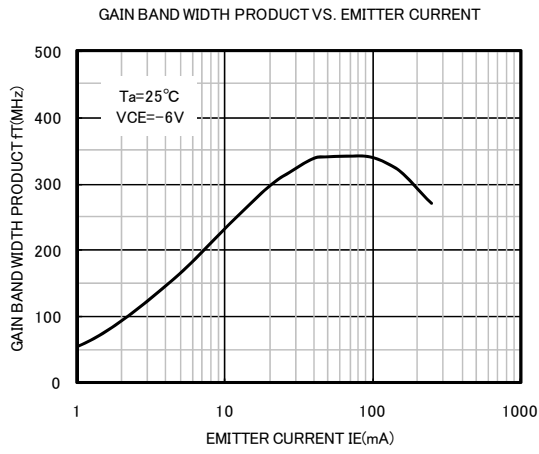
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TYPICAL CHARACTERISTICS



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