

PRELIMINARY

※This datasheet is possibility of change.
Because this device is developing now.

ISA2188AU1

FOR GENERAL PURPOSE HIGH CURRENT DRIVE APPLICATION
SILICON PNP EPITAXIAL TYPE

DESCRIPTION

ISA2188AU1 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

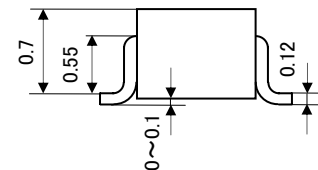
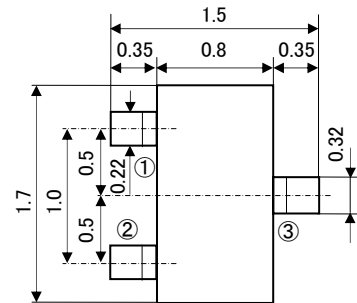
$$V_{CE(sat)} < -0.7V_{max}$$

APPLICATION

For switching application, small type motor drive application.

OUTLINE DRAWING

Unit: mm



TERMINAL CONNECTOR

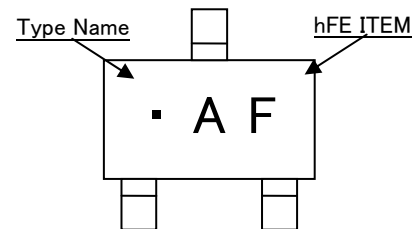
- ①: BASE
- ②: EMITTER
- ③: COLLECTOR

JEITA: SC-75A
JEDEC: —

MAXIMUM RATINGS (Ta=25°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	150	mW
T_j	Junction temperature	150	°C
T_{stg}	Storage temperature	-55~150	°C

MARKING



ELECTRICAL CHARACTERISTICS (Ta=25°C)

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

*: It shows hFE classification in below table.

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

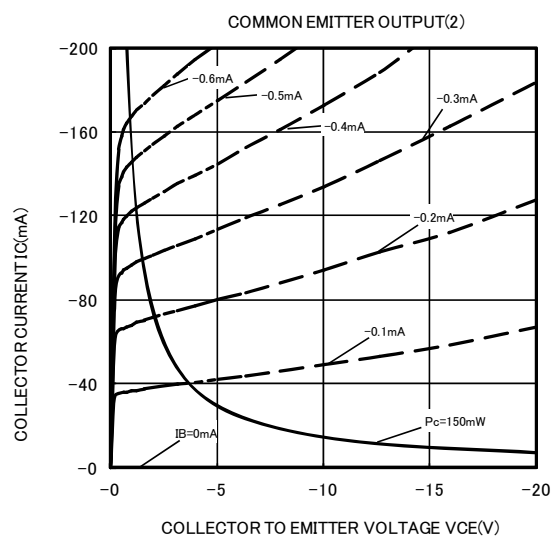
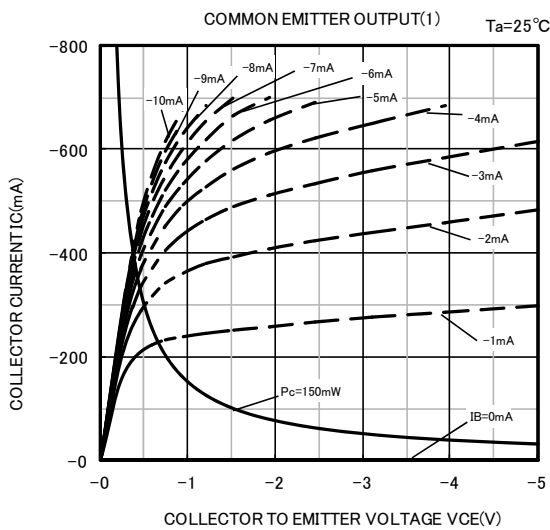
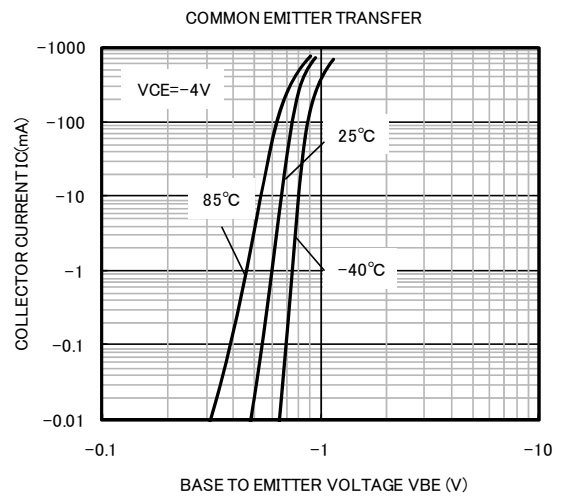
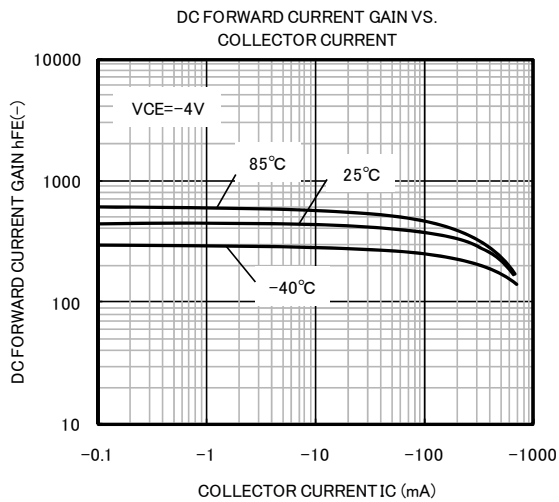
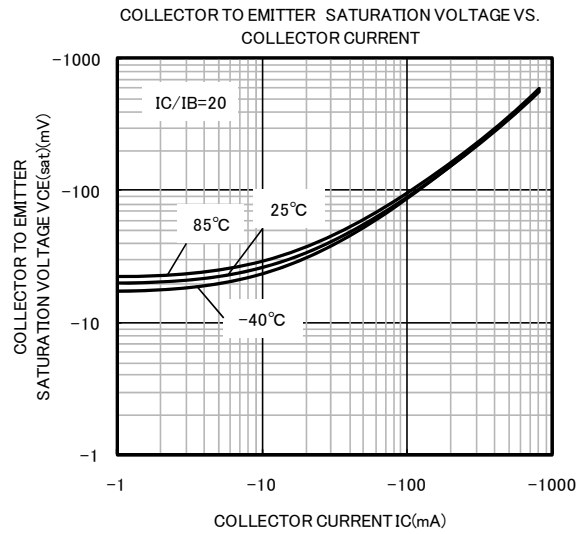
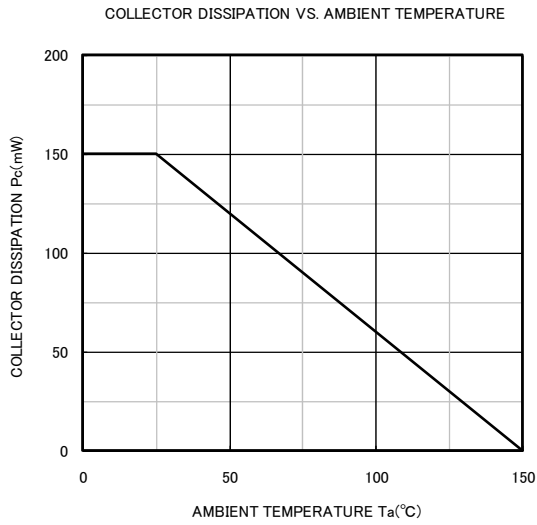
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TYPICAL CHARACTERISTICS

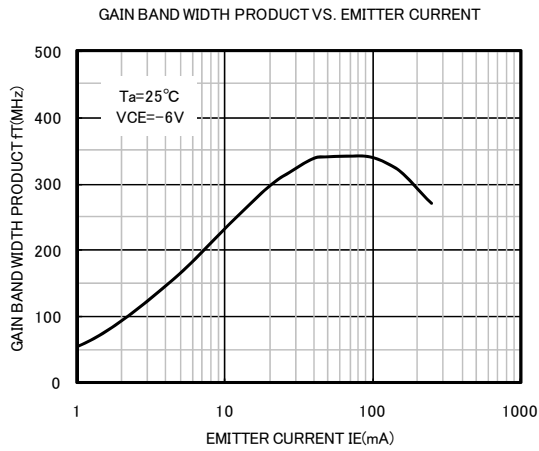


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