2SA1365

FOR HIGH CURRENT DRIVE APPLICATION SILICON PNP EPITAXIAL TYPE

DESCRIPTION OUTLINE DRAWING Unit:mm 2SA1365 is a super mini silicon PNP epitaxial type 2.8 transistor designed with high collector current, small Vce(sat). 0.65 1.5 0.65 Complementary with 2SC3440. 95 7 1 **FEATURE** 6. 2.8 •Low collector to emitter saturation voltage. VCE(sat)=-0.2V typ •Excellent linearity of DC forward current gain. Super mini package for easy mounting. ●High collector current Icm=-1A ●High gain band width product fT=180MHz typ . ~ 0 **APPLICATION** JEITA: SC-59 Small type motor drive, relay drive, power supply. JEDEC: Similar to TO-236 TERMINAL CONNECTER 1:BASE 2: EMITTER 3: COLLECTOR MAXIMUM RATINGS(Ta=25°C) Symbol Note) Unit Parameter Ratings V_{CBO} -25 v The dimension without tolerance represent central value. Collector to Base voltage -4 Emitter to Base voltage V_{EBO} V MARKING Collector to Emitter voltage V_{CEO} -20 ٧ -1 А Peak Collector current I _{CM} -700 Collector current mΑ Ι_c Collector dissipation 200 P_{c} mW (Ta=25°C) ₩350 °C Junction temperature T_i +150 $-55 \sim +150$ Storage temperature °C T_{stg} TYPE NAME hFE ITEM *package mounted on substrate. ELECTRICAL CHARACTERISTICS (Ta=25°C) Limits Parameter Test conditions Unit Symbol Min Тур Max C to B breakdown voltage V(BR)CBO $I_{c} = -10 \,\mu \,A$, $I_{F} = 0$ -25 ٧ _ _ E to B breakdown voltage V(BR)EBO I $_{\rm E}\text{=-10}\,\mu\,\text{A}$, I $_{\rm C}\text{=0}$ -4 ٧ V(BR)CEO C to E breakdown voltage I c=-100 μ A ,R _{BE}= ∞ -20 _ _ ٧ Collector cut off current Ісво V _{CB}=-25V, I _E=0 -1 μA _ _ V _{EB}=-2V, I _C=0-1 Emitter cut off current IEBO _ _ μA DC forward current gain hFE V _{ce}=-4V, I _c=-100mA 150 _ 800 _ C to E Saturation Vlotage VCE(sat) I c=-500mA ,I_B=-25mA _ -0.2 -0.5 ٧ Gain band width product fT V _{CE}=-6V, I _E=10mA 100 180 _ MHz

 $\circledast)$ It shows hFE classification in below table

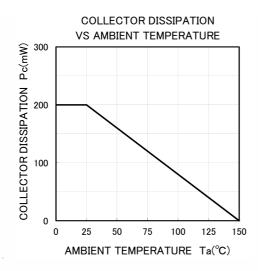
 Marking
 AE
 AF
 AG

 hFE
 150 to 300
 250 to 500
 400 to 800

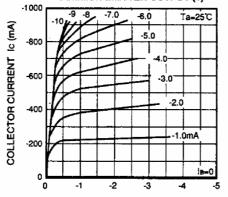
2SA1365

FOR HIGH CURRENT DRIVE APPLICATION SILICON PNP EPITAXIAL TYPE

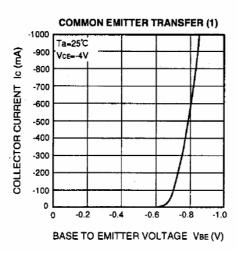
TYPICAL CHARACTERISTICS

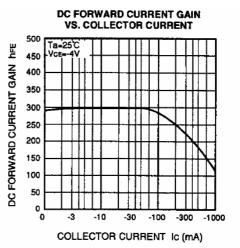


COMMON EMITTER OUTPUT (1)

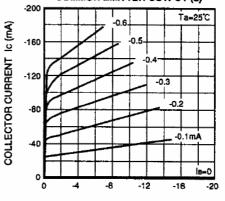


COLLECTOR TO EMITTER VOLTAGE VCE (V)

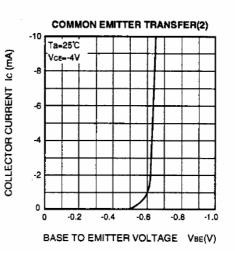




COMMON EMITTER OUTPUT (2)



COLLECTOR TO EMITTER VOLTAGE VCE (V)





6-41 Tsukuba, Isahaya, Nagasaki, 854-0065 Japan

Keep safety first in your circuit designs!

ISAHAYA Electronics Corporation puts the maximum effort into making semiconductor products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with semiconductors may lead to personal injury, fire or property damage. Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (1) placement of substitutive, auxiliary, (2) use of non-farmable material or (3) prevention against any malfunction or mishap.

Notes regarding these materials

These materials are intended as a reference to our customers in the selection of the ISAHAYA products best suited to the customer's application; they don't convey any license under any intellectual property rights, or any other rights, belonging

Customer's application; they don't convey any license under any intellectual property rights, or any other rights, belonging ISAHAYA or third party. -ISAHAYA Electronics Corporation assumes no responsibility for any damage, or infringement of any third party's rights, originating in the use of any product data, diagrams, charts or circuit application examples contained in these materials. -All information contained in these materials, including product data, diagrams and charts, represent information on products at the time of publication of these materials, and are subject to change by ISAHAYA Electronics Corporation without notice due to product improvements or other reasons. It is therefore recommended that customers contact ISAHAYA Electronics Corporation or an authorized ISAHAYA products distributor for the latest product information before purchasing product listed boroin. hereir

ISAHAYA Electronics Corporation products are not designed or manufactured for use in a device or system that is used under circumstances in which human life is potentially at stake. Please contact ISAHAYA electronics corporation or an authorized ISAHAYA products distributor when considering the use of a product contained herein for any specific purposes, such as apparatus or systems for transportation, vehicular, medical, aerospace, nuclear, or undersea repeater use.
 The prior written approval of ISAHAYA Electronics Corporation is necessary to reprint or reproduce in whole or in part these

materials.

If these products or technologies are subject to the Japanese export control restrictions, they must be exported under a license from the Japanese government and cannot be imported into a country other than the approved destination. Any diversion or re-export contrary to be export control laws and regulations of Japan and/or the country of destination is prohibited. •Please contact ISAHAYA Electronics Corporation or authorized ISAHAYA products distributor for further details on these

materials or the products contained therein.