

**DESCRIPTION**

2SC3246 is a silicon NPN epitaxial type transistor. Designed with high collector current and high hFE.  
Complementary with 2SA1286.

**FEATURE**

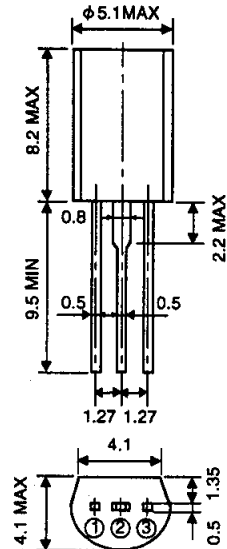
- High hFE hFE=400 to 3000
- High collector current (IC=1.5A, ICM=3A)
- Low collector to emitter saturation voltage  
VCE(sat)=0.2V typ (@ IC=1A, IB=20mA)
- High collector dissipation Pc=900mW

**APPLICATION**

VCR, tape-deck small type motor drive of player, plunger, drive of relay, power supply of ripple filter.

**OUTLINE DRAWING**

Unit:mm



**TERMINAL CONNECTOR**

- ① : EMITTER EIAJ : —
- ② : COLLECTOR JEDEC : —
- ③ : BASE

Note)  
The dimension without tolerance represent central value.

**MAXIMUM RATINGS (Ta=25°C)**

Symbol	Parameter	Ratings	Unit
Vcbo	Collector to Base voltage	30	V
Vebo	Emitter to Base voltage	6	V
Vceo	Collector to Emitter voltage	25	V
icm	Peak Collector current	3	A
ic	Collector current	1.5	A
Pc	Collector dissipation(Ta=25°C)	900	mW
Tj	Junction temperature	+150	°C
Tstg	Storage temperature	-55 to +150	°C

**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
V(BR)CBO	C to B break down voltage	IC=10 μA, IE=0	30			V
V(BR)EBO	E to B break down voltage	IE=10 μA, IC=0	6			V
V(BR)CEO	C to E break down voltage	IC=1mA, RE=∞	25			V
ICBO	Collector cut off current	VCE=20V, IE=0			0.1	μA
IEBO	Emitter cut off current	VEB=2V, IC=0			0.1	μA
hFE *	DC forward current gain	VCE=6V, IC=500mA	400		3000	—
VCE(sat)	C to E saturation voltage	IC=1A, IB=20mA		0.2	0.5	V
ft	Gain band width product	VCE=10V, IE=-10mA		130		MHz
Cob	Collector output capacitance	VCE=10V, IE=0, f=1MHz		17		pF

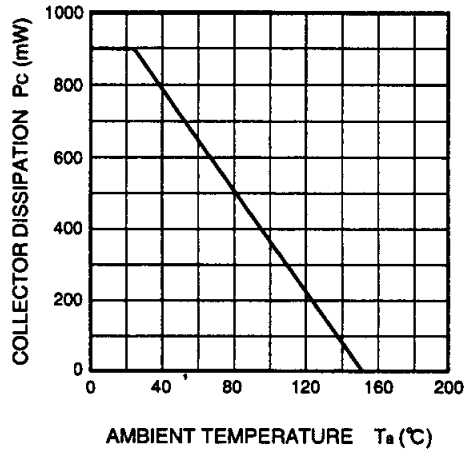
\* : It shows hFE classification in right table.

Item	G	H	J	K
hFE	400 to 800	600 to 1200	900 to 1800	1500 to 3000

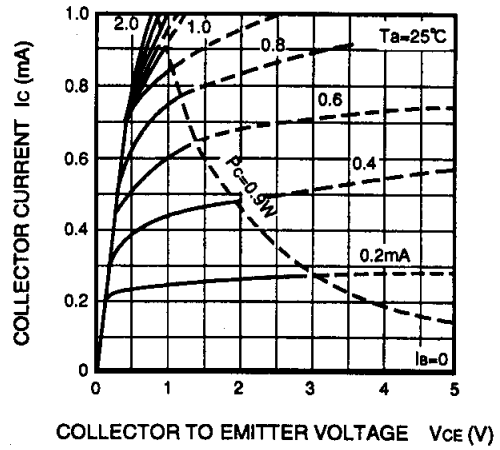
FOR SMALL TYPE MOTOR, PLUNGER DRIVE APPLICATION  
SILICON NPN EPITAXIAL TYPE

**TYPICAL CHARACTERISTICS**

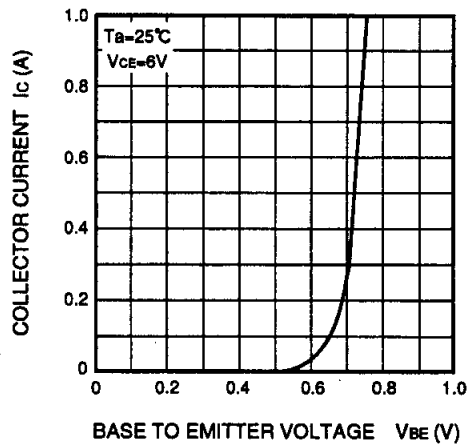
**COLLECTOR DISSIPATION VS. AMBIENT TEMPERATURE**



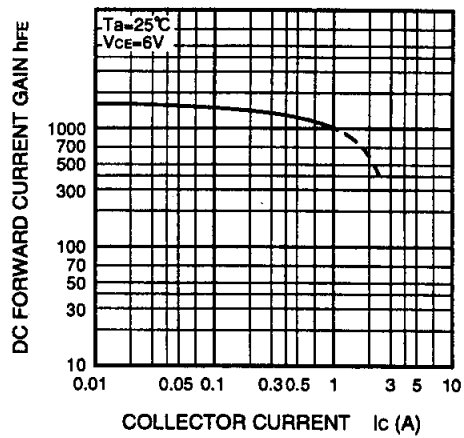
**COMMON EMITTER OUTPUT**



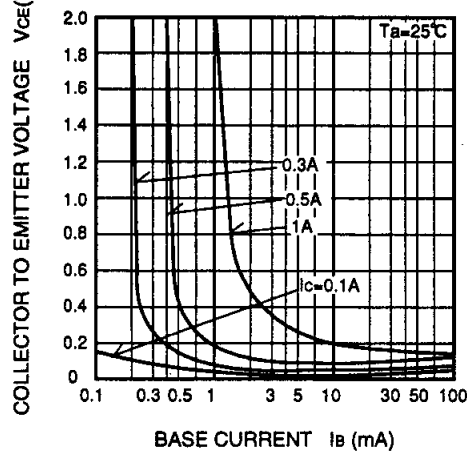
**COMMON EMITTER TRANSFER**



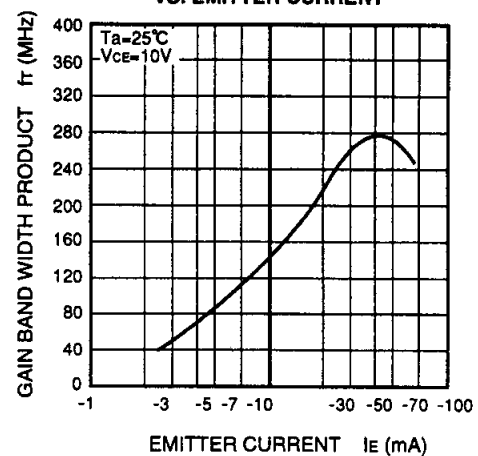
**DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT**



**COLLECTOR TO EMITTER SATURATION VOLTAGE VS. BASE CURRENT**



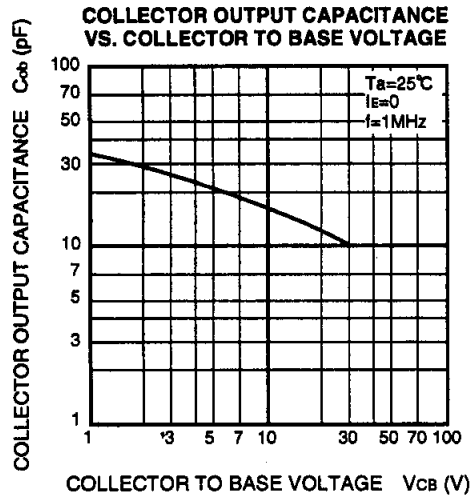
**GAIN BAND WIDTH PRODUCT VS. EMITTER CURRENT**



<SMALL-SIGNAL TRANSISTOR>

**2SC3246**

FOR SMALL TYPE MOTOR, PLUNGER DRIVE APPLICATION  
SILICON NPN EPITAXIAL TYPE



---

The logo for IDC ISAHAYA ELECTRONICS CORPORATION. It features the letters 'IDC' in a stylized blue font with a red triangle above the 'I'. To the right of 'IDC', the words 'ISAHAYA ELECTRONICS CORPORATION' are written in a black, italicized, serif font.

<http://www.idc-com.co.jp>  
6-41, TSUKUBA, ISAHAYA, NAGASAKI, 854-0065, JAPAN

Keep safety 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 consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of non-flammable material or (iii) prevention against any malfunction or mishap.

Notes regarding these materials

·These materials are intended as reference to assist out customers in the selection of the Isahaya semiconductor product best suited to the customer's application, they do not convey any license under any intellectual property rights, or any other rights, belonging to Isahaya Electronics Corporation or a third party.  
·Isahaya Electronics Corporation assumes no responsibility for any damage, or infringement of any third-party rights, originating in the use of any product data, diagrams, charts or circuit application examples contained in the 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 authorized Isahaya Semiconductor product distributor for the latest product information before purchasing a product listed herein.  
·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 reexport contrary to the export control laws and regulations of Japan and/or the country of destination is prohibited.  
·Please contact Isahaya Electronics Corporation or an authorized Isahaya Semiconductor product distributor for further details on these materials or the products contained therein.

---

This datasheet has been downloaded from:

[www.DatasheetCatalog.com](http://www.DatasheetCatalog.com)

Datasheets for electronic components.