〈transistor〉

2SC5485

For High Current Application
Silicon NPN Epitaxial Type Micro

DESCRIPTION

2SC5485 is a silicon NPN epitaxial type transistor designed with high collector current, small VCE(sat).

FEATURE

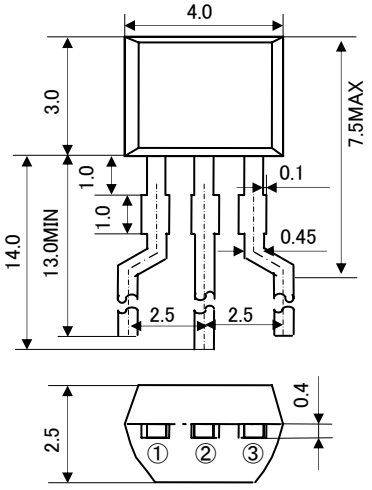
- High collector current I_{CM} = 1000mA
- Excellent linearity of DC forward current gain
- Low collector to emitter saturation voltage
  $V_{CE(sat)}$ = 0.2V type(@I_C=500mA,I_B=25mA)
- High gain band width product fT=180Hz type
- High collector dissipation Pc=600mW

APPLICATION

Small type motor drive, relay drive, power supply application

OUTLINE DRAWING

UNIT : mm



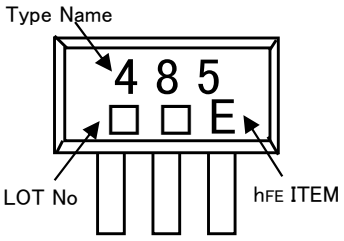
TERMINAL CONNECTOR
①:EMITTER
②:COLLECTOR
③:BASE

EIAJ: –
JEDEC: –

MAXIMUM RATINGS (Ta=25℃)

Symbol	Parameter	Ratings	Unit
V_{CBO}	Collector to Base voltage	25	V
V_{EBO}	Emitter to Base voltage	4	V
V_{CEO}	Collector to Emitter voltage	20	V
I_C	Collector current	700	mA
I_{CM}	Peak collector current	1000	mA
P_C	Collector dissipation	600	mW
Tj	Junction temperature	+150	℃
Tstg	Storage temperature	−55～+150	℃

MARKING



ELECTRICAL CHARACTERISTICS (Ta=25℃)

Parameter	Symbol	Test conditions	Limits			Unit
			Min	Typ	Max	
$V_{(BR)CBO}$	C to B breakdown voltage	I_C=10μA , I_E=0	25	–	–	V
$V_{(BR)EBO}$	E to B breakdown voltage	I_E=10μA , I_C=0	4	–	–	V
$V_{(BR)CEO}$	C to E breakdown voltage	I_C=100μA , R_{BE}=∞	20	–	–	V
ICBO	Collector cut off current	V_{CB}=25V , I_E=0	–	–	1	μA
IEBO	Emitter cut off current	V_{EB}=2V , I_C=0	–	–	1	μA
hFE	DC forward current gain ※	V_{CE}=4V , I_C=100mA	150	–	800	–
VCE(sat)	C to E Saturation voltage	I_C=500mA , I_B=25mA	–	0.2	0.5	V
fT	Gain bandwidth product	V_{CE}=6V , I_E=−10mA	–	180	–	MHz

※ : It shows hFE classification at right table.

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

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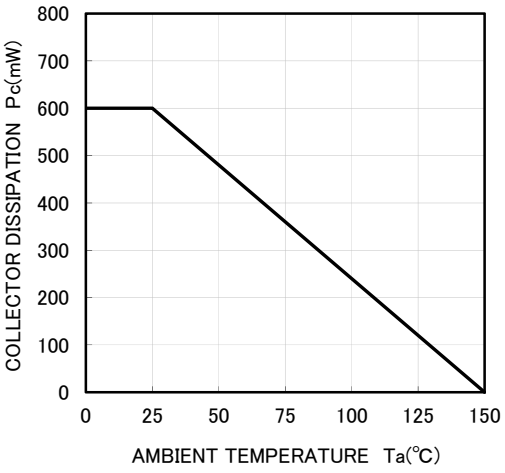
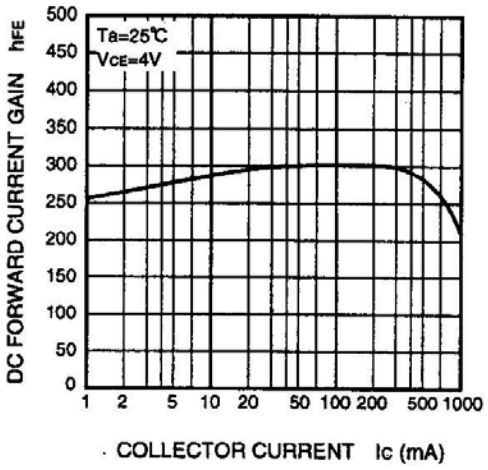
TYPICAL CHARACTERISTICS

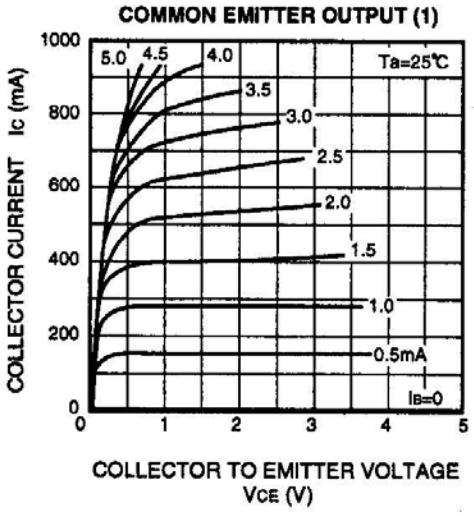
COLLECTOR DISSIPATION
VS AMBIENT TEMPERATURE



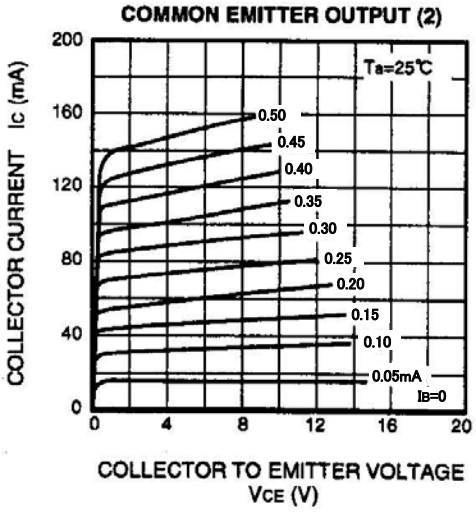
DC FORWARD CURRENT GAIN VS.
COLLECTOR CURRENT



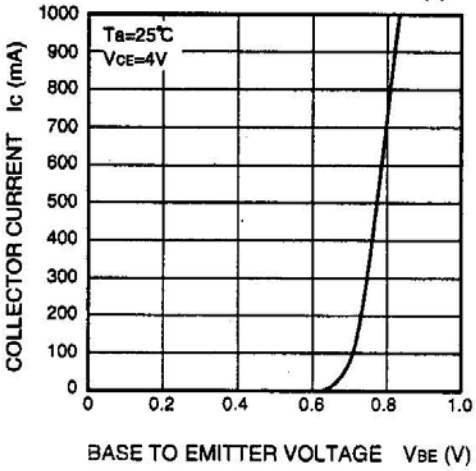
COMMON EMITTER OUTPUT (1)



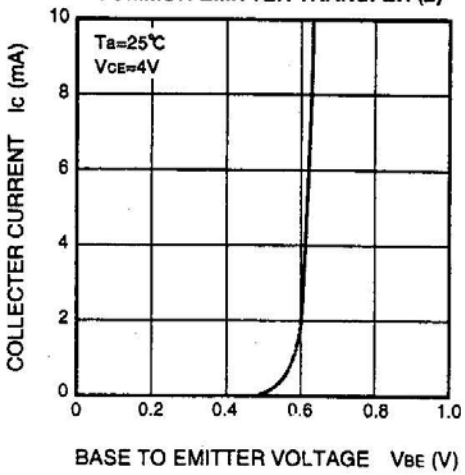
COMMON EMITTER OUTPUT (2)



COMMON EMITTER TRANSFER (1)



COMMON EMITTER TRANSFER (2)



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Mar.2016