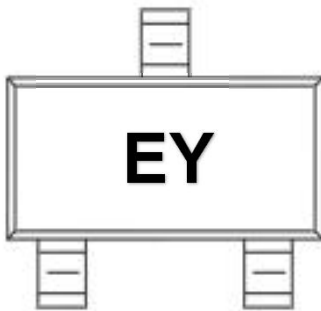


## SOT-23 Plastic-Encapsulate MOSFETS

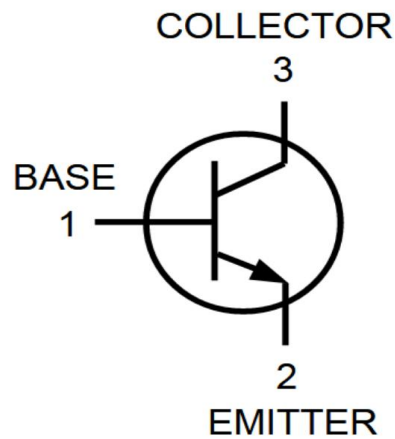
# 2SC3265

## TRANSISTOR (NPN)

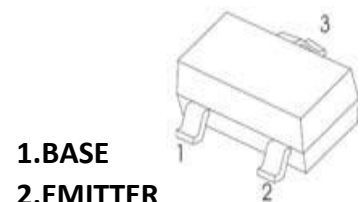
### MARKING:



### Equivalent Circuit:



### SOT-23



- 1.BASE
- 2.EMITTER
- 3.COLLECTOR

### FEATURES:

- ※ Complimentary to 2SC1298
- ※ High DC current gain
- ※ Low saturation voltage:  $V_{CE(sat)} = 0.4\text{ V (max)}$   
( $I_C = 800\text{ mA}$ ,  $I_B = 20\text{ mA}$ ).

### MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	VCBO	35	V
Collector-Emitter Voltage	VCEO	30	V
Emitter-Base Voltage	VEBO	5	V
Collector Current	IC	800	mA
Collector Power Dissipation	PC	200	mW
Thermal Resistance From Junction To Ambient	RθJA	625	°C/W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~+150	°C

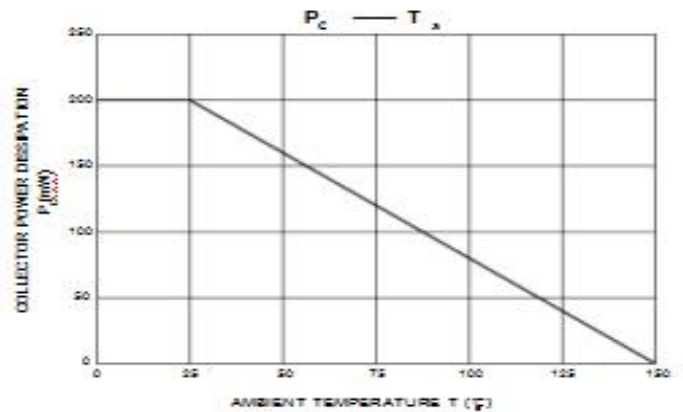
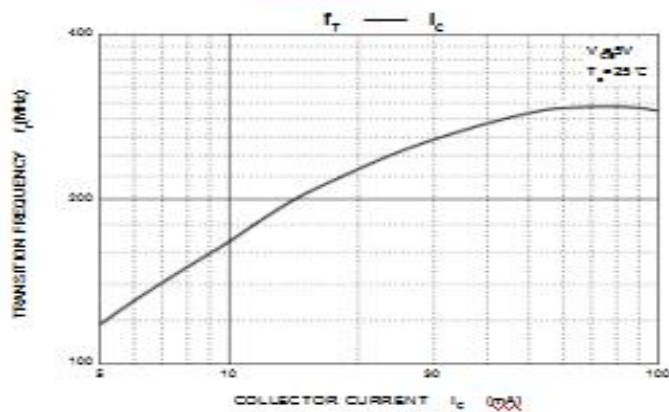
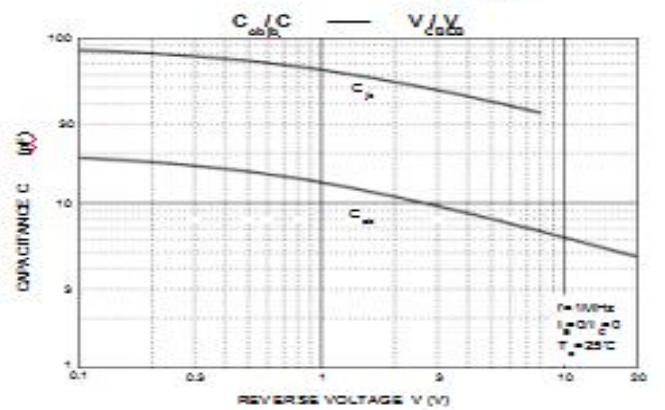
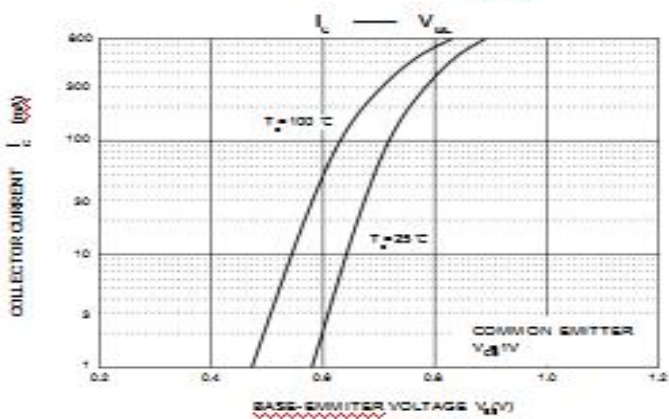
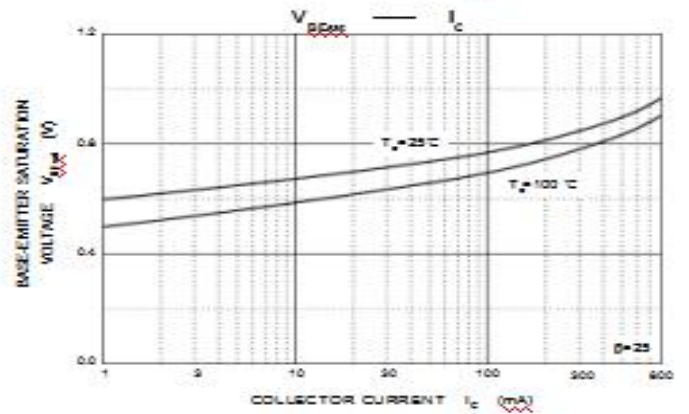
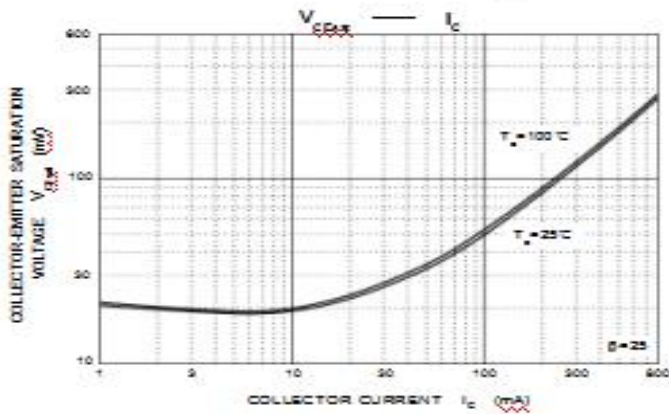
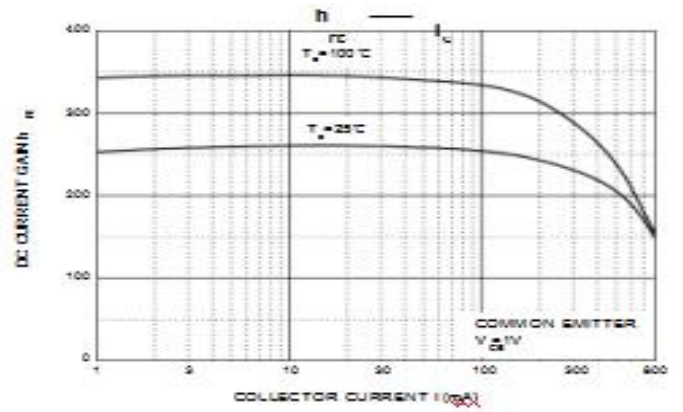
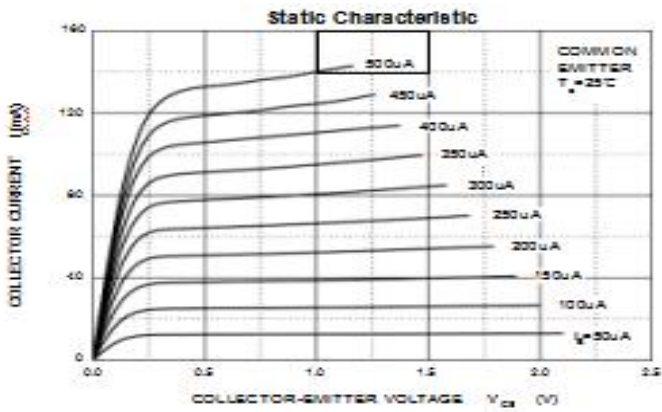
**ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)**

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	<b>V(BR)CBO</b>	IC= 100μA, IE=0	35			V
Collector-emitter breakdown voltage	<b>V(BR)CEO</b>	IC= 10mA, IB=0	30			V
Emitter-base breakdown voltage	<b>V(BR)EBO</b>	IE=100μA, IC=0	5			V
Collector cut-off current	<b>ICBO</b>	VCB=30 V , IE=0			0.1	μA
Collector cut-off current	<b>ICEO</b>	VCB=25V , IE=0			0.1	μA
Emitter cut-off current	<b>IEBO</b>	VEB= 5V , IC=0			0.1	μA
DC current gain	<b>hFE</b>	VCE=1V, IC= 100mA	100		320	
Collector-emitter saturation voltage	<b>VCE(sat)</b>	IC=500 mA, IB= 20mA			0.5	V
Base-emitter saturation voltage	<b>VBE(sat)</b>	VCE= 1V, IC= 10mA	0.5		0.8	V
Transition frequency	<b>fT</b>	VCE=5V, IC= 10mA f=100MHz		120		MHz
Collector output capacitance	<b>Cob</b>	VCB=10V,IE=0, f=1MHZ		13		PF

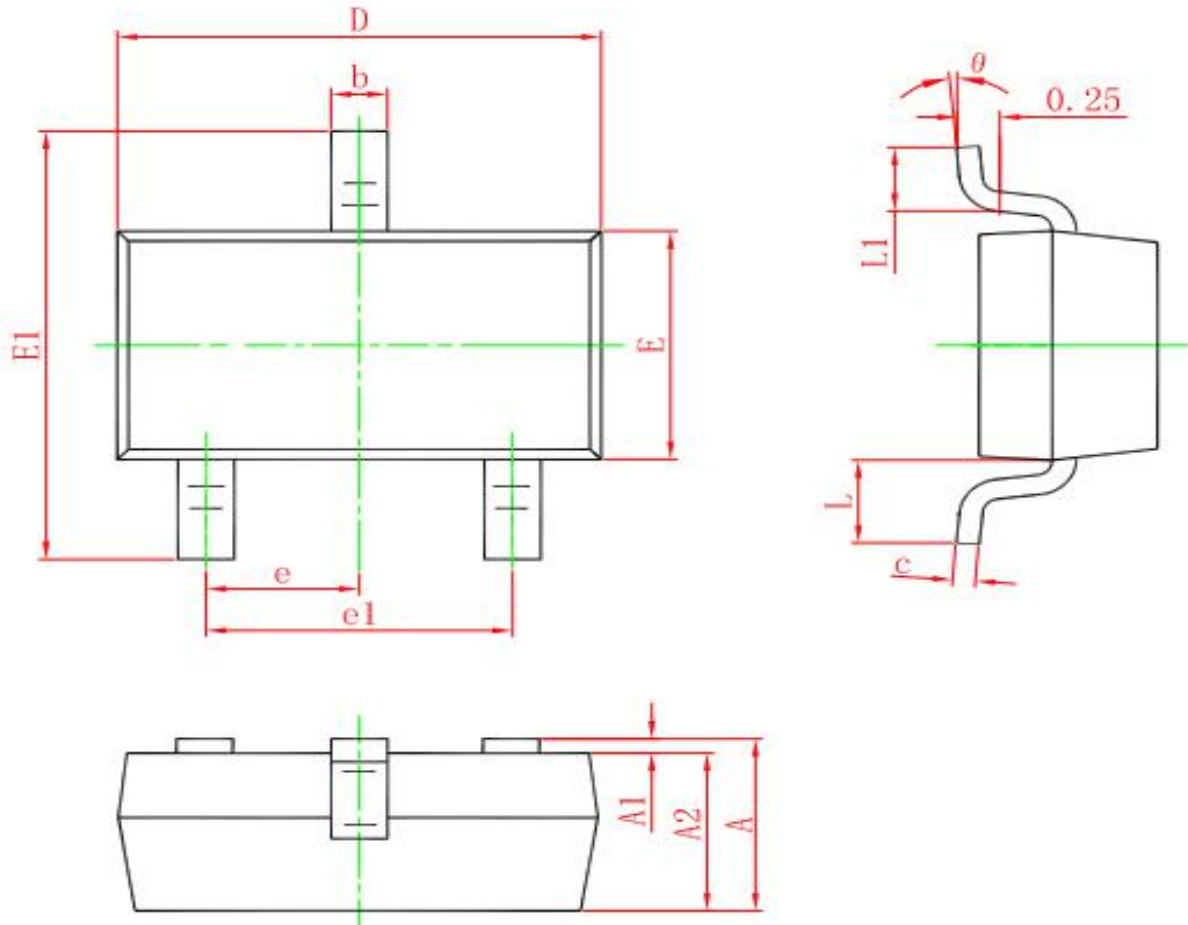
**CLASSIFICATION OF hFE**

<b>Rank</b>	<b>O</b>	<b>Y</b>
<b>Range</b>	<b>100-200</b>	<b>160-320</b>
<b>Marking</b>	<b>EO</b>	<b>EY</b>

## TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS



### SOT-23 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP.		0.037 TYP.	
e1	1.800	2.000	0.071	0.079
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
$\theta$	0°	8°	0°	8°