

## ● FEATURES

### Power dissipation

$P_{CM}$ : 0.3 W ( $T_{amb}=25^{\circ}C$ )

### Collector current

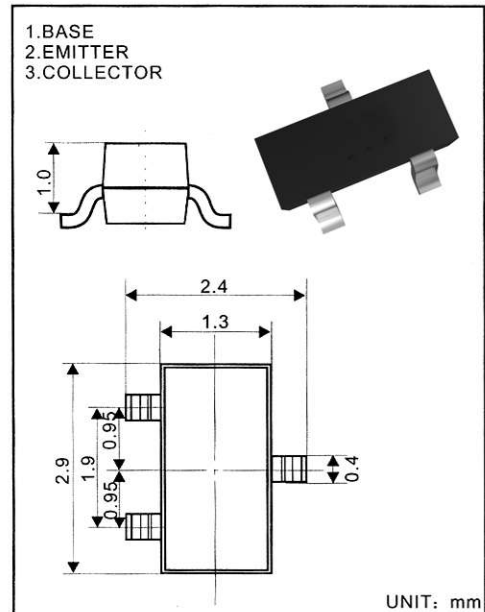
$I_{CM}$ : 0.5 A

### Collector-base voltage

$V_{(BR)CBO}$ : 40V

### Operating and storage junction temperature range

$T_j, T_{stg}$ :  $-55^{\circ}C$  to  $+150^{\circ}C$



## ● ELECTRICAL CHARACTERISTICS

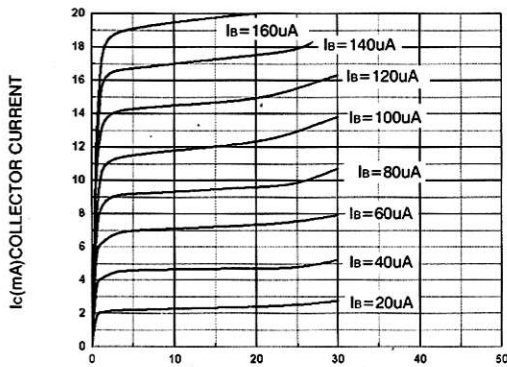
( $T_{amp}=25^{\circ}C$  unless otherwise specified)

Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_c=100 \mu A, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_c=0.1mA, I_b=0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100 \mu A, I_c=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=40V, I_E=0$			0.1	$\mu A$
	$I_{CEO}$	$V_{CE}=20V, I_b=0$			0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_c=0$			0.1	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE}=1V, I_c=50mA$	120		350	
	$h_{FE(2)}$	$V_{CE}=1V, I_c=500mA$	40			
Collector-emitter saturation voltage	$V_{CEsat}$	$I_c=500mA, I_b=50mA$			0.6	V
Base-emitter saturation voltage	$V_{BEsat}$	$I_c=500mA, I_b=50mA$			1.2	V
Base-emitter voltage	$V_{BEF}$	$I_E=100mA$			1.4	V
Transition frequency	$f_t$	$V_{CE}=6V, I_c=20mA$ $f=30MHz$	150			MHz

## ● CLASSIFICATION OF $h_{FE(1)}$

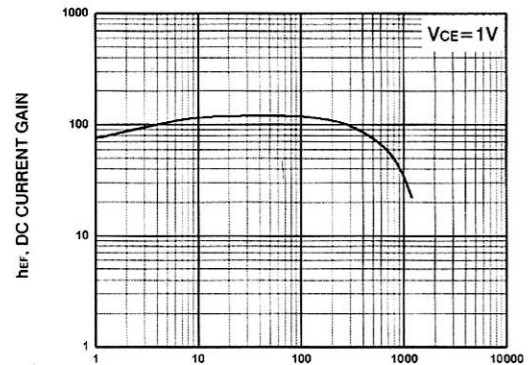
Range	120-200	200-350
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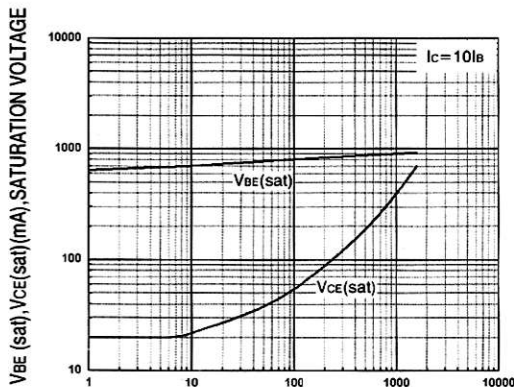
Vce(V), COLLECTOR-EMITTER VOLTAGE

**Static Characteristic**



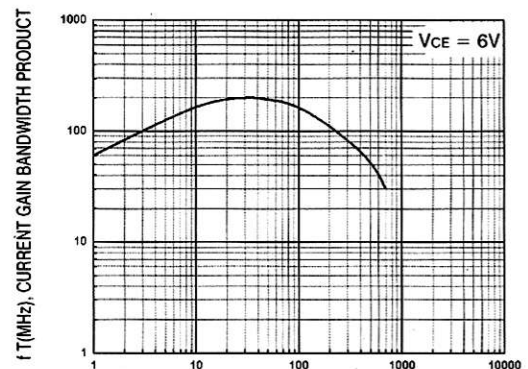
Ic (mA), COLLECTOR CURRENT

**DC current Gain**



Ic (mA), COLLECTOR CURRENT

**Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage**



Ic (mA), COLLECTOR CURRENT

**Current Gain Bandwidth Product**

