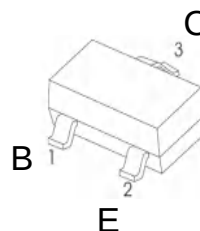
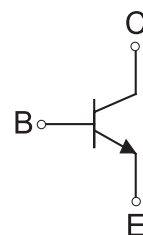




2SC3198 TRANSISTOR (NPN)

FEATURES

- General Purpose Switching Application
- Complementary to KTA1266.



SOT-23

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_{C}	Collector Current -Continuous	0.15	A
P_{D}	Collector Power Dissipation	625	mW
$R_{\theta \text{ JA}}$	Thermal Resistance from Junction to Ambient	200	$^{\circ}\text{C} / \text{W}$
$T_{\text{J}}, T_{\text{stg}}$	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS $T_a=25^{\circ}\text{C}$ unless otherwise specified

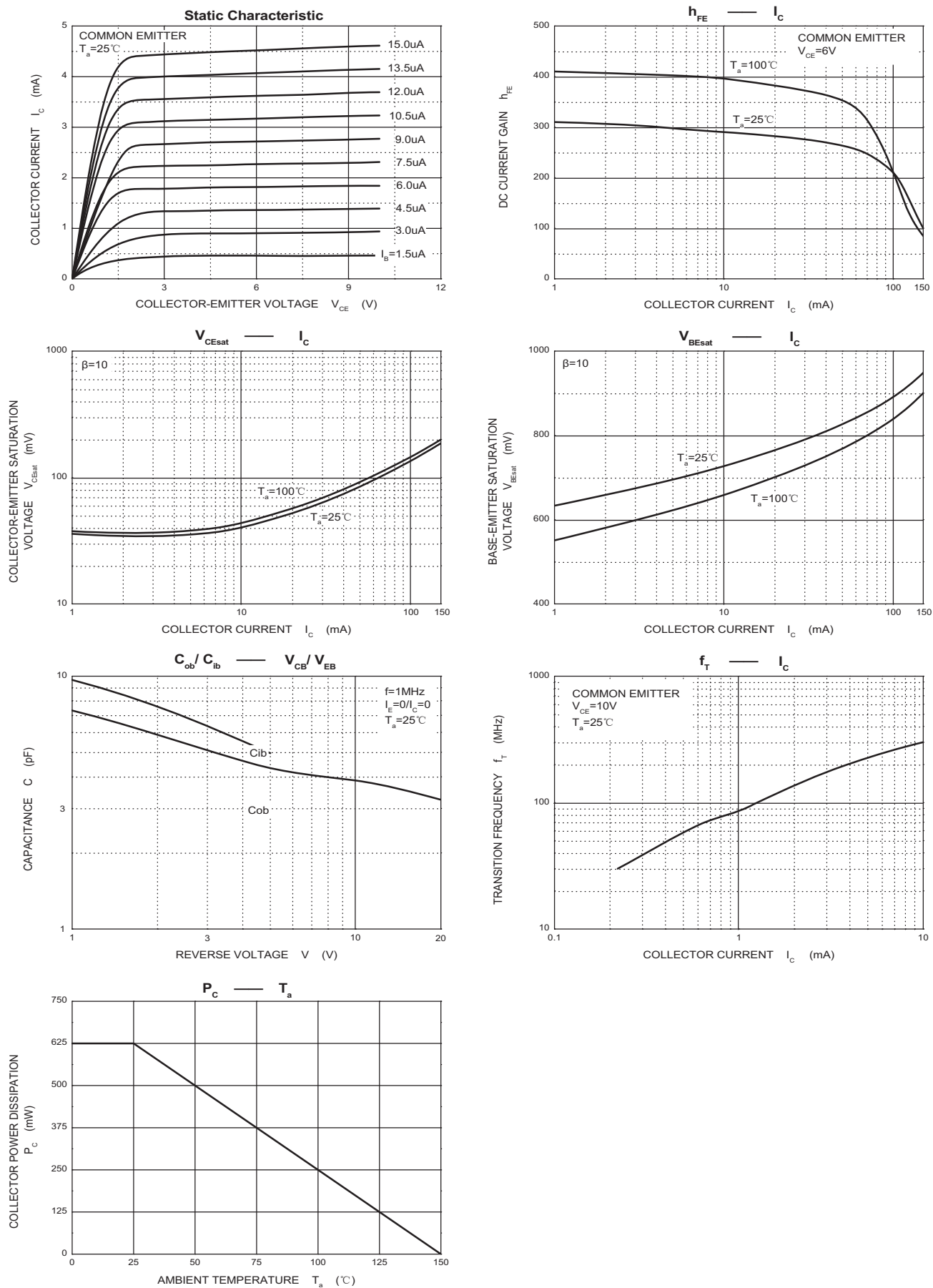
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	$I_{\text{C}}=0.1\text{mA}, I_{\text{E}}=0$	60			V
Collector-emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	$I_{\text{C}}=5\text{mA}, I_{\text{B}}=0$	50			V
Emitter-base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	$I_{\text{E}}=0.1\text{mA}, I_{\text{C}}=0$	5			V
Collector cut-off current	I_{CBO}	$V_{\text{CB}}=60\text{V}, I_{\text{E}}=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{\text{EB}}=5\text{V}, I_{\text{C}}=0$			0.1	μA
DC current gain	$h_{\text{FE}(1)}$	$V_{\text{CE}}=6\text{V}, I_{\text{C}}=2\text{mA}$	70		700	
	$h_{\text{FE}(2)}$	$V_{\text{CE}}=6\text{V}, I_{\text{C}}=150\text{mA}$	25			
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}}=100\text{mA}, I_{\text{B}}=10\text{mA}$			0.25	V
Base-emitter saturation voltage	$V_{\text{BE(sat)}}$	$I_{\text{C}}=100\text{mA}, I_{\text{B}}=10\text{mA}$			1	V
Transition frequency	f_{T}	$V_{\text{CE}}=10\text{V}, I_{\text{C}}=1\text{mA}$	80			MHz
Collector Output Capacitance	C_{ob}	$V_{\text{CB}}=10\text{V}, I_{\text{E}}=0, f=1\text{MHz}$			3.5	pF

CLASSIFICATION OF $h_{\text{FE}(1)}$

RANK	O	Y	GR	BL
RANGE	70-140	120-240	200-400	300-700



Typical Characteristics

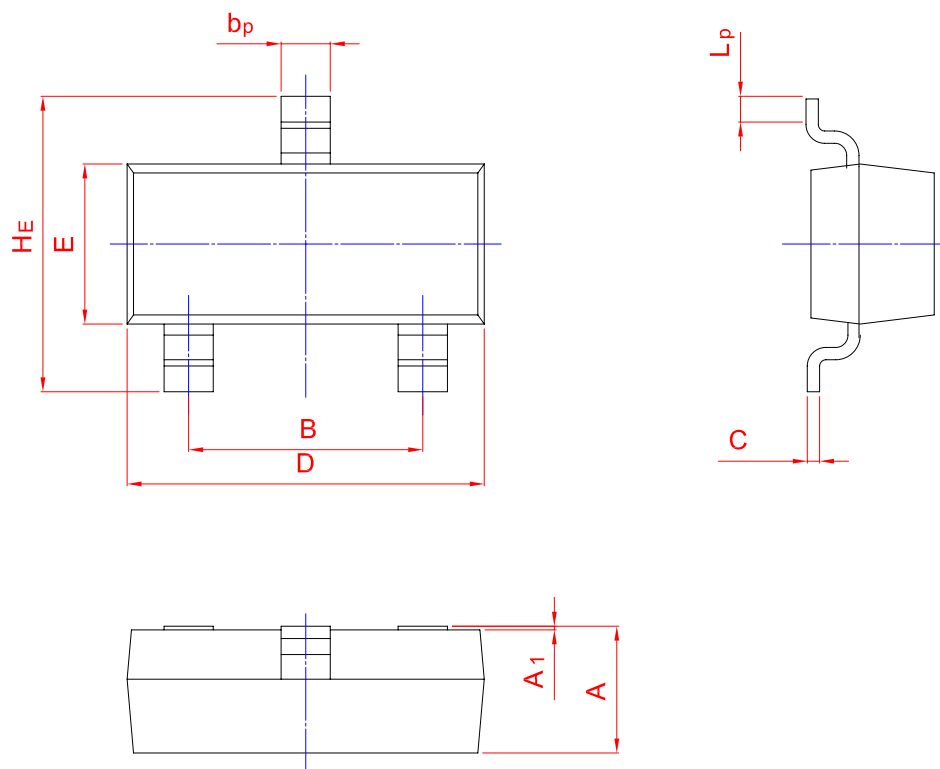
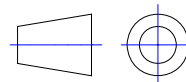




PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

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UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20