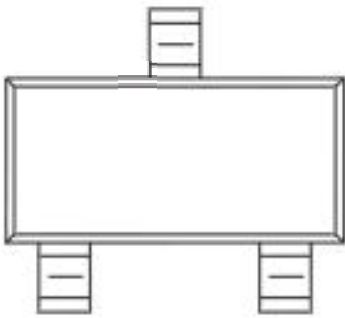
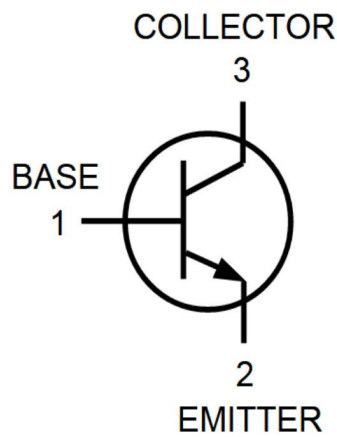


TRANSISTOR (NPN)

MARKING:

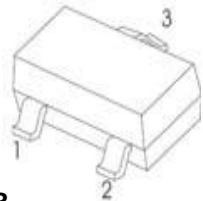


Equivalent Circuit:



SOT-23

1.BASE
2.EMITTER
3.COLLECTOR



FEATURES:

- ※ Complimentary to **TSD2SC2712**
- ※ LOW noise NF= 1DB(Typ) 10dB (MAX)

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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	VCBO	60	V
Collector-Emitter Voltage	VCEO	50	V
Emitter-Base Voltage	VEBO	5	V
Collector Current	IC	150	mA
Collector Power Dissipation	PC	150	mW
Thermal Resistance From Junction To Ambient	RθJA	833	°C/W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~+150	°C

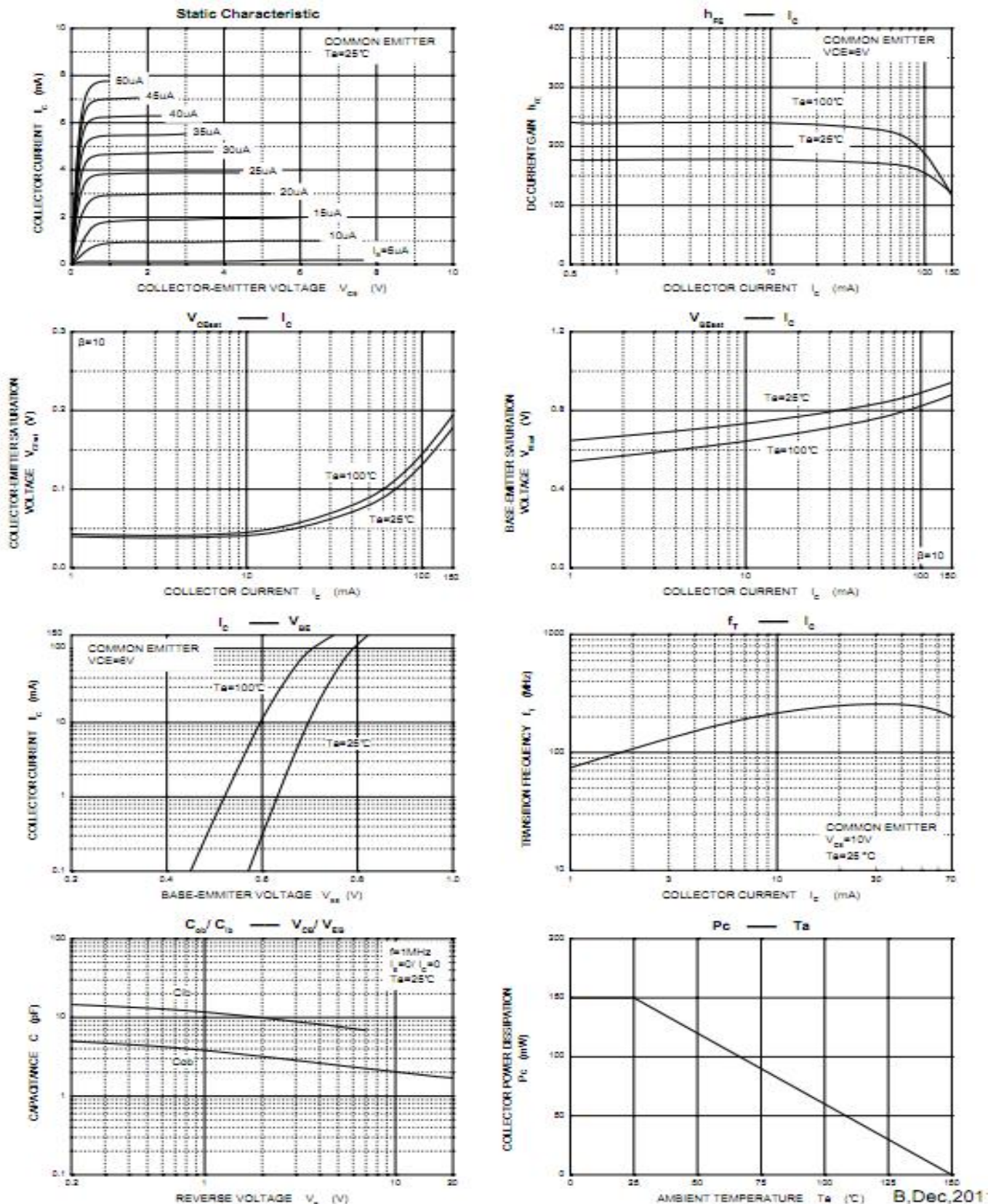
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC= 100μA, IE=0	60			V
Collector-emitter breakdown voltage	V(BR)CEO	IC= 1mA, IB=0	50			V
Emitter-base breakdown voltage	V(BR)EBO	IE=100μA, IC=0	5			V
Collector cut-off current	ICBO	VCB=60 V , IE=0			0.1	μA
Emitter cut-off current	IEBO	VEB= 5V , IC=0			0.1	μA
DC current gain	hFE	VCE=6V, IC= 2mA	70		700	
Collector-emitter saturation voltage	VCE(sat)	IC=100 mA, IB= 10mA		0.1	0.25	V
Base-emitter saturation voltage	VBE(sat)	IC=100 mA, IB= 10mA			1	V
Transition frequency	fT	VCE=10V, IC= 1mA f=1MHz	80			MHz
Collector Output Capacitance	Cob	VCE=10V, IE= 0 f=1MHz		2.0	3.5	pf
Noise Figure	NF	VCE=6V, IC= 0.1mA Rg=10kΩ; f=1KHz		1.0	10	dB

CLASSIFICATION OF hFE

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700
Marking	LO	LY	LG	LL

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS



B, Dec, 201