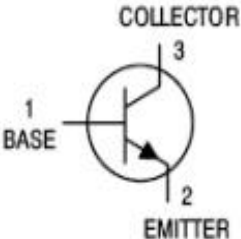
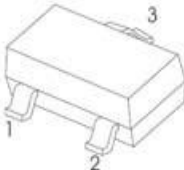


TRANSI STOR (NPN)	SOT-23 Plastic-Encapsulate Transistors																																				
<u>SOT-23</u>  1.BASE 2.EMITTER 3.COLLECTOR Marking :CR	Features ※ Complimentary to 2SA733 ※ Excellent HFE Linearity ※ LOW noise																																				
MAXIMUM RATINGS (Ta=25℃ unless otherwise noted) <table><tr><th>Parameter</th><th>Symbol</th><th>Value</th><th>Unit</th></tr><tr><td>Collector-Base Voltage</td><td>VCBO</td><td>60</td><td>V</td></tr><tr><td>Collector-Emitter Voltage</td><td>VCEO</td><td>50</td><td>V</td></tr><tr><td>Emitter-Base Voltage</td><td>VEBO</td><td>5</td><td>V</td></tr><tr><td>Collector Current</td><td>IC</td><td>150</td><td>mA</td></tr><tr><td>Collector Power Dissipation</td><td>PC</td><td>200</td><td>mW</td></tr><tr><td>Thermal Resistance From Junction To Ambient</td><td>RθJA</td><td>417</td><td>℃/W</td></tr><tr><td>Junction Temperature</td><td>Tj</td><td>150</td><td>℃</td></tr><tr><td>Storage Temperature</td><td>Tstg</td><td>-55~+150</td><td>℃</td></tr></table>		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	200	mW	Thermal Resistance From Junction To Ambient	RθJA	417	℃/W	Junction Temperature	Tj	150	℃	Storage Temperature	Tstg	-55~+150	℃
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ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC= 100 μ A, 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=100 μ A, IC=0	5			V
Collector cut-off current	ICBO	VCB=60 V, IE=0			0.1	μ A
Collector cut-off current	ICER	VCB=55V, R=10M Ω			0.1	μ A
Emitter cut-off current	IEBO	VEB= 5V, IC=0			0.1	μ A
DC current gain	hFE	VCE=6V, IC= 1mA	120		400	
	hFE	VCE=6V, IC= 0.1mA	40			
Collector-emitter saturation voltage	VCE(sat)	IC=100 mA, IB= 10mA			0.3	V
Base-emitter saturation voltage	VBE(sat)	IC=100 mA, IB= 10mA			1	V
Transition frequency	fT	VCE=6V, IC= 10mA f=30MHz	150			MHz
Collector Output Capacitance	Cob	VCE=10V, IE= 0 f=1MHz			3.0	pf
Noise Figure	NF	VCE=6V, IC= 20mA Rg=10k Ω ; f=30MHz		4	10	dB

CLASSIFICATION OF hFI

Rank	L	H	
Range	130-200	200-400	

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS

