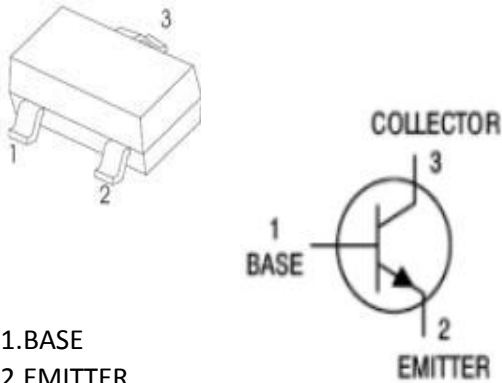


TRANSISTOR (NPN)	SOT-23 Plastic-Encapsulate Transistors																																				
SOT-23  1.BASE 2.EMITTER 3.COLLECTOR Marking :J3	Features ※ Complimentary to S9012 ※ Collector Current: Ic=0.5A ※ Excellent Hfe Linearity																																				
MAXIMUM RATINGS (Ta=25℃ unless otherwise 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>40</td><td>V</td></tr><tr><td>Collector-Emitter Voltage</td><td>VCEO</td><td>25</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>500</td><td>mA</td></tr><tr><td>Collector Power Dissipation</td><td>PC</td><td>300</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	40	V	Collector-Emitter Voltage	VCEO	25	V	Emitter-Base Voltage	VEBO	5	V	Collector Current	IC	500	mA	Collector Power Dissipation	PC	300	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	40			V
Collector-emitter breakdown voltage	V(BR)CEO	IC= 1mA, IB=0	25			V
Emitter-base breakdown voltage	V(BR)EBO	IE=100 μ A, IC=0	5			V
Collector cut-off current	ICBO	VCB=40 V, IE=0			0.1	μ A
Collector cut-off current	ICEO	VCE=25V, IB=0			0.1	μ A
Emitter cut-off current	IEBO	VEB= 5V, IC=0			0.1	μ A
DC current gain	hFE	VCE=1V, IC= 50mA	200		350	
	hFE	VCE=1V, IC= 500mA	40			
Collector-emitter saturation voltage	VCE(sat)	IC=500 mA, IB= 50mA			0.6	V
Base-emitter saturation voltage	VBE(sat)	IC=500 mA, IB= 50mA			1.2	V
Transition frequency	fT	VCE=6V, IC=20mA f=30MHz	150			MHz

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS

