TO-92 NPN Silicon NPN transistor in a TO-92 Plastic Package.

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Low $V_{CE(sat)}$

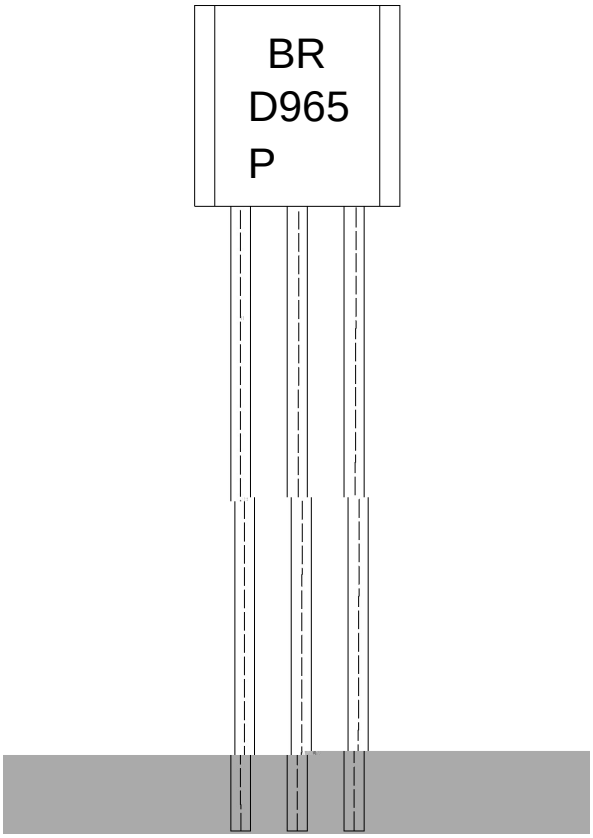
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current - Continuous	I_C	5.0	A
Collector Current – Continuous(Pulse)	I_{CP}	8.0	A
Collector Power Dissipation	P_C	750	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA I_B=0	20			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=10 A I_C=0	7.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=10V I_E=0			0.1	A
Emitter Cut-Off Current	I_{EBO}	V_{EB}=7.0V I_C=0			0.1	A
DC Current Gain	$h_{FE(1)}$	V_{CE}=2.0V I_C=0.5A	180		1000	
	$h_{FE(2)}$	V_{CE}=2.0V I_C=2.0A	150			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=3.0A I_B=0.1A			1.0	V
Transition Frequency	f_T	V_{CE}=6.0V I_C=50mA		150		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=20V I_E=0 f=1.0MHz			50	pF

/ Marking Instructions



BR:

D965

P: h_{FE}

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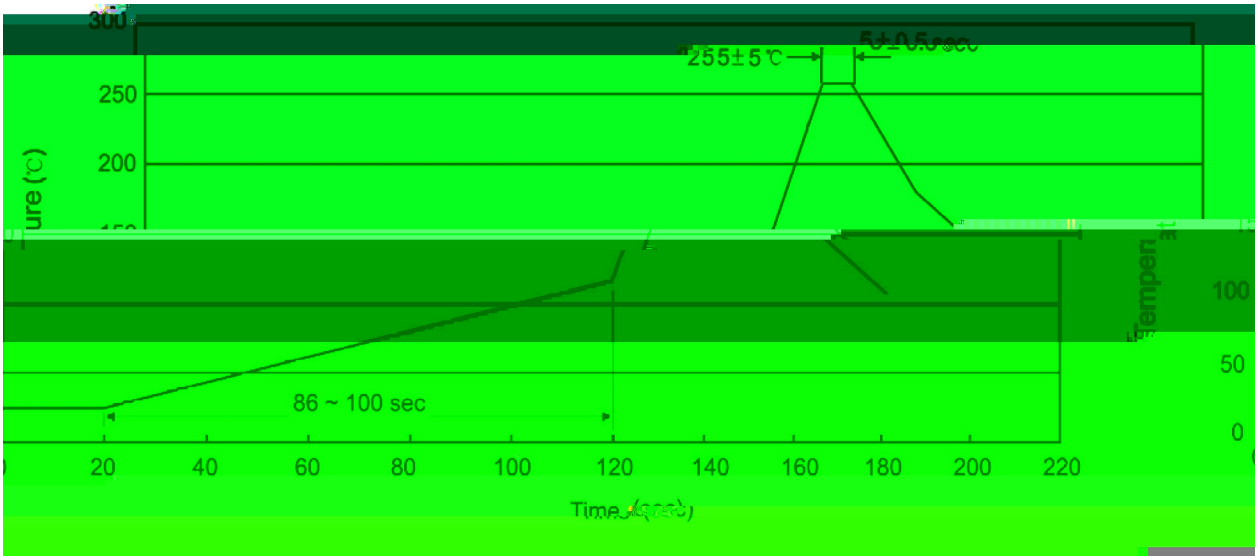
Note:

BR:	Company Code.
D965:	Product Type.
P:	h_{FE} Classifications Symbol
****:	Lot No. Code,code change with Lot No.

( ) / Temperature Profile for Dip Soldering(Pb-Free)



					Note:
1		25	150	60 90sec;	1.Preheating:25~150 , Time:60~90sec.
2		255±5		5±0.5sec;	2.Peak Temp.:255±5 , Duration:5±0.5sec.
3			2	10 /sec.	3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

270±5	10±1 sec.	Temp:270±5	Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units					Dimension		(unit mm3)