Elektronische Bauelemente

2SD1271A

7A , 150V

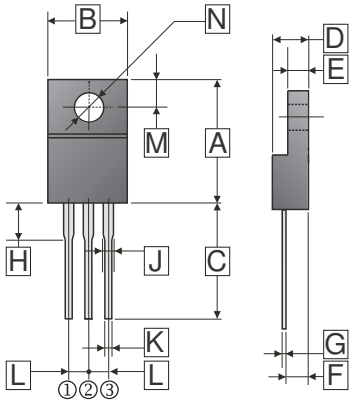
NPN Plastic-Encapsulated Transistor

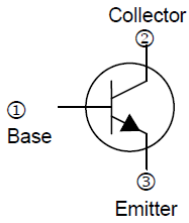
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Power switching applications
- Low Collector to Emitter Saturation Voltage $V_{CE(sat)}$
- Satisfactory Linearity of Forward Current Transfer Ratio h_{FE}
- Large Collector Current

ITO-220J





REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.80	15.60	H	3.00	4.00
B	9.50	10.50	J	0.90	1.50
C	13.00 REF.		K	0.50	0.90
D	4.30	4.70	L	2.34	2.74
E	2.50	3.20	M	2.50	2.90
F	2.40	2.90	N	ϕ 3.5 REF.	
G	0.30	0.75			

CLASSIFICATION OF h_{FE}

Product-Rank	2SD1271A-R	2SD1271A-Q	2SD1271A-P
Range	60~120	90~180	130~260

ABSOLUTE MAXIMUM RATINGS (T_A=25℃ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	150	V
Collector to Emitter Voltage	V_{CEO}	100	V
Emitter to Base Voltage	V_{EBO}	7	V
Collector Current - Continuous	I_C	7	A
Collector Power Dissipation	P_C	2	W
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	62.5	℃ / W
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	150	-	-	V	I_C=0.1mA, I_E=0
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	100	-	-	V	I_C=10mA, I_B=0
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	7	-	-	V	I_E=0.1mA, I_C=0
Collector Cut – Off Current	I_{CBO}	-	-	10	μA	V_{CB}=100V, I_E=0
Emitter Cut – Off Current	I_{EBO}	-	-	50	μA	V_{EB}=5V, I_C=0
DC Current Gain	h_{FE}	45	-	-		V_{CE}=2V, I_C=0.1A
		60	-	260		V_{CE}=2V, I_C=3A
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	0.5	V	I_C=5A, I_B=250mA
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	1.5	V	I_C=5A, I_B=250mA
Transition Frequency	f_T	-	30	-	MHz	V_{CE}=10V, I_C=500mA, f =10MHz

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RATINGS AND CHARACTERISTIC CURVES

