Elektronische Bauelemente

2SD2118

5A , 50V

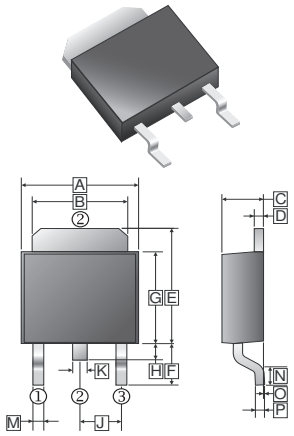
NPN Plastic Encapsulated Transistor

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

FEATURES

- Low $V_{CE(sat)}$. $V_{CE(sat)}$ = 0.25V(Typ.) (I_C/I_B = 4A / 0.1A)
- Excellent DC Current Gain Characteristics

D-Pack (TO-252)

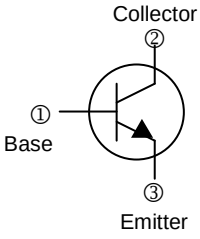


CLASSIFICATION OF h_{FE}

Product-Rank	2SD2118-Q	2SD2118-R
Range	120~270	180~390

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.35	6.8	J	2.30 REF.	
B	5.20	5.50	K	0.64	0.90
C	2.15	2.40	M	0.50	1.1
D	0.45	0.58	N	0.9	1.65
E	6.8	7.5	O	0	0.15
F	2.40	3.0	P	0.43	0.58
G	5.40	6.25			
H	0.64	1.20			

ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	5	A
Collector Power Dissipation	P_C	1	W
Junction and Storage Temperature Range	T_J ,T_{STG}	150 , -55~150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	$V_{(BR)CBO}$	50	-	-	V	I_C=50μA, I_E=0
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	20	-	-	V	I_C=1mA, I_B=0
Emitter-base breakdown voltage	$V_{(BR)EBO}$	6	-	-	V	I_E=50μA, I_C=0
Collector cut-off current	I_{CBO}	-	-	0.5	μA	V_{CB}=40V, I_E=0
Emitter cut-off current	I_{EBO}	-	-	0.5	μA	V_{EB}=5V, I_C=0
DC current gain	h_{FE}	120	-	390		V_{CE}=2V, I_C=500mA
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	1	V	I_C=4A, I_B=100mA
Transition frequency	f_T	-	150	-	MHz	V_{CE}=6V, I_C=50mA, f=100MHz
Collector Output Capacitance	C_{OB}	-	30	-	pF	V_{CB}=20V, I_E=0, f=1MHz