Elektronische Bauelemente

2SD2153

2A , 30V

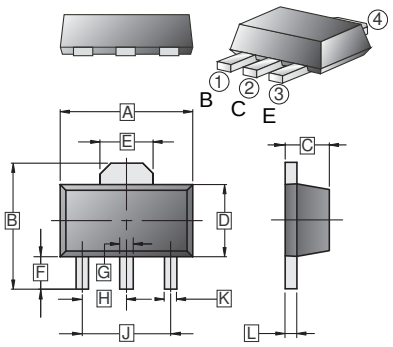
NPN Plastic Encapsulated Transistor

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

FEATURES

- Small Flat Package
- General Purpose Application

SOT-89

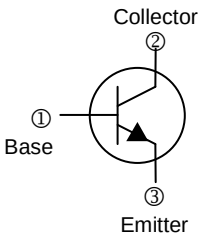


CLASSIFICATION OF $h_{FE(1)}$

Product-Rank	2SD2153-U	2SD2153-V
Range	560~1200	820~1800

MARKING

DN



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.60	G	0.40	0.58
B	3.94	4.25	H	1.50 TYP	
C	1.40	1.60	J	3.00 TYP	
D	2.25	2.60	K	0.32	0.52
E	1.50	1.85	L	0.35	0.44
F	0.89	1.20			

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-89	1K	7 inch

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

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current-Continuous	I_C	2	A
Pulsed Collector Current [1]	I_{CP}	3	A
Collector Power Dissipation	P_C	0.5	W
Maximum Junction to Ambient	$R_{\theta JA}$	250	℃ / 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 conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	30	-	-	V	I_C=50μA, I_E=0
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	25	-	-	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}=20V, I_E=0
Emitter Cut-Off Current	I_{EBO}	-	-	0.5	μA	V_{EB}=5V, I_C=0
DC Current Gain[1]	h_{FE}	560	-	1800		V_{CE}=6V, I_C=500mA
Collector-Emitter Saturation voltage	$V_{CE(sat)}$	-	-	0.5	V	I_C=1A, I_B=20mA
Transition Frequency	f_T	-	110	-	MHz	V_{CE}=10V,I_C=10mA,f=100MHz
Collector Output Capacitance	C_{OB}	-	22	-	pF	V_{CB}=10V, I_E=0, f=1MHz

Note:
1. Single pulse, PW=10mS

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CHARACTERISTIC CURVES