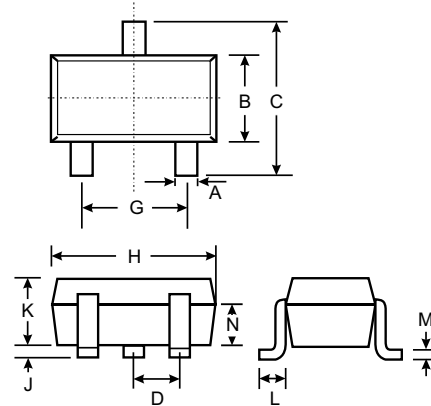


Features

- Ultra Miniature Surface Mount Package

Mechanical Data

- Case: SOT-523, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Terminal Connections: See Diagram
- Marking: 2DA1774Q: 8A
2DA1774R: 8B
2DA1774S: 8C
- Weight: 0.002 grams (approx.)



SOT-523			
Dim	Min	Max	Typ
A	0.15	0.30	0.22
B	0.75	0.85	0.80
C	1.45	1.75	1.60
D	—	—	0.50
G	0.90	1.10	1.00
H	1.50	1.70	1.60
J	0.00	0.10	0.05
K	0.60	0.80	0.75
L	0.10	0.30	0.22
M	0.10	0.20	0.12
N	0.45	0.65	0.50
All Dimensions in mm			

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	2DA1774Q/R/S	Unit
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-6.0	V
Collector Current - Continuous (Note 1)	I_C	150	mA
Power Dissipation (Note 1)	P_d	150	mW
Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	833	$^\circ\text{C/W}$
Operating and Storage and Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
OFF CHARACTERISTICS (Note 2)					
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-60	—	V	$I_C = -50\mu\text{A}, I_E = 0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-50	—	V	$I_C = 1.0\mu\text{A}, I_B = 0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-6.0	—	V	$I_E = -50\mu\text{A}, I_C = 0$
Collector Cutoff Current	I_{CBO}	—	-100	nA	$V_{CB} = -60\text{V}$
Emitter Cutoff Current	I_{EBO}	—	-100	nA	$V_{EB} = -6.0\text{V}$
ON CHARACTERISTICS (Note 2)					
DC Current Gain	h_{FE}	120 180 270	270 390 560	—	$V_{CE} = -6.0\text{V}, I_C = -1.0\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	—	-0.5	V	$I_C = -50\text{mA}, I_B = -5.0\text{mA}$
SMALL SIGNAL CHARACTERISTICS					
Output Capacitance	C_{obo}	4.0 Typ.	5.0	pF	$V_{CB} = -12\text{V}, f = 1.0\text{MHz}, I_E = 0$
Current Gain-Bandwidth Product	f_T	140 Typ.	—	MHz	$V_{CE} = -12\text{V}, I_C = -2.0\text{mA}, f = 30\text{MHz}$

- Notes: 1. Valid provided that terminals are kept at ambient temperature.
2. Short duration pulse test to minimize self-heating effect.