

Transistors

# High frequency amplifier transistor, RF switching (60V, 50mA)

## 2SC4774 / 2SC4713K

●Features

- 1) Very low output-on resistance (Ron).
- 2) Low capacitance.

●Absolute maximum ratings (Ta=25°C)

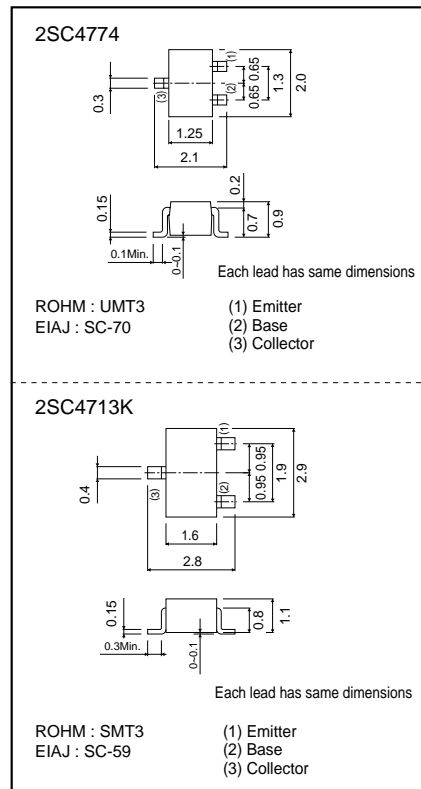
Parameter	Symbol	Limits	Unit
Collector-base voltage	V <sub>CB0</sub>	12	V
Collector-emitter voltage	V <sub>CE0</sub>	6	V
Emitter-base voltage	V <sub>EB0</sub>	3	V
Collector current	I <sub>c</sub>	50	mA
Collector power dissipation	2SC4774	0.15	W
	2SC4713K	0.2	
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55~+150	°C

●Packaging specifications and hFE

Type	2SC4774	2SC4713K
Package	UMT3	SMT3
hFE	S	S
Marking	BM*	BM*
Code	T106	T146
Basic ordering unit (pieces)	3000	3000

\*Denotes hFE

●External dimensions (Units : mm)



●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV <sub>CB0</sub>	12	-	-	V	I <sub>c</sub> =10μA
Collector-emitter breakdown voltage	BV <sub>CE0</sub>	6	-	-	V	I <sub>c</sub> =1mA
Emitter-base breakdown voltage	BV <sub>EB0</sub>	3	-	-	V	I <sub>E</sub> =10μA
Collector cutoff current	I <sub>cbo</sub>	-	-	0.5	μA	V <sub>CB</sub> =10V
Emitter cutoff current	I <sub>EBO</sub>	-	-	0.5	μA	V <sub>EB</sub> =2V
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	-	-	0.3	V	I <sub>c</sub> /I <sub>E</sub> =10mA/1mA
DC current transfer ratio	h <sub>FE</sub>	270	-	560	-	V <sub>CE</sub> /I <sub>c</sub> =10V/10mA
Transition frequency	f <sub>r</sub>	300	800	-	MHz	V <sub>CE</sub> =5V, I <sub>c</sub> =10mA
Output capacitance	C <sub>ob</sub>	-	1	1.7	pF	V <sub>CB</sub> =10V, I <sub>E</sub> =0A, f=1MHz
Output-on resistance	R <sub>on</sub>	-	2	-	Ω	I <sub>E</sub> =3mA, V <sub>I</sub> =100mVrms, f=500kHz