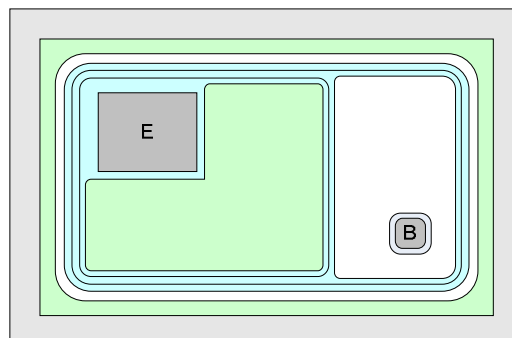


3PT068080JL PHOTO TRANSISTOR CHIPS

DESCRIPTION

- Ø 3PT068080JL is NPN phototransistor chips that fabricated in silicon epitaxial planar technology;
- Ø The chips are widely used in photo-coupler for switching power suppliers;
- Ø It has low dark current, high sensitivity, high responsible time etc;
- Ø The top side electrode material is Al, and the backside electrode material is Au;
- Ø Chip Size: $680\mu\text{m} \times 450\mu\text{m}$;
- Ø Chip Thickness: $220 \pm 20\mu\text{m}$;
- Ø Emitter PAD Size(E): $130\mu\text{m} \times 105\mu\text{m}$;
- Ø Base PAD Size(B): $40\mu\text{m} \times 40\mu\text{m}$ (only for chip probing).



Chip Topography

E: Emitter B: Base

ABSOLUTE MAXIMUM RATINGS

Parameters	Symbol	Ratings	Unit
Maximum Operation Junction Temperature	T _J	125	°C
Storage Temperature Range	T _{STG}	-40~125	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C)

Characteristics	Symbol	Test conditions	Min.	Max.	Unit
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =100μA, I _B =0μA	80		V
Emitter-Collector Breakdown Voltage	BV _{ECO}	I _C =10μA, I _B =0μA	7		V
Collector Dark Current	I _{CEO}	V _{CE} =20V, H=0mW/cm ²		50	nA
		V _{CE} =80V, H=0mW/cm ²		150	nA
Collector Emitter Saturation Voltage	V _{CE(SAT)}	I _C =2mA, I _B =100μA		0.2	V
		I _C =20mA, I _B =100μA		2	V
Rise/ Fall Time	T _r /T _f	V _{CE} =2V, I _C =2mA, R _L =100 Ω		10	μs
Current Gain	h _{FE}	V _{CE} =5V, I _C =2mA	700		
Collector-Base Capacitance	C _{CB}	f=1MHz, V _{CB} =3V		7.4	pF