

isc Silicon PNP Power Transistor

TIP107

DESCRIPTION

- Low saturation voltage.
- High reliability
- High breakdown voltage

APPLICATIONS

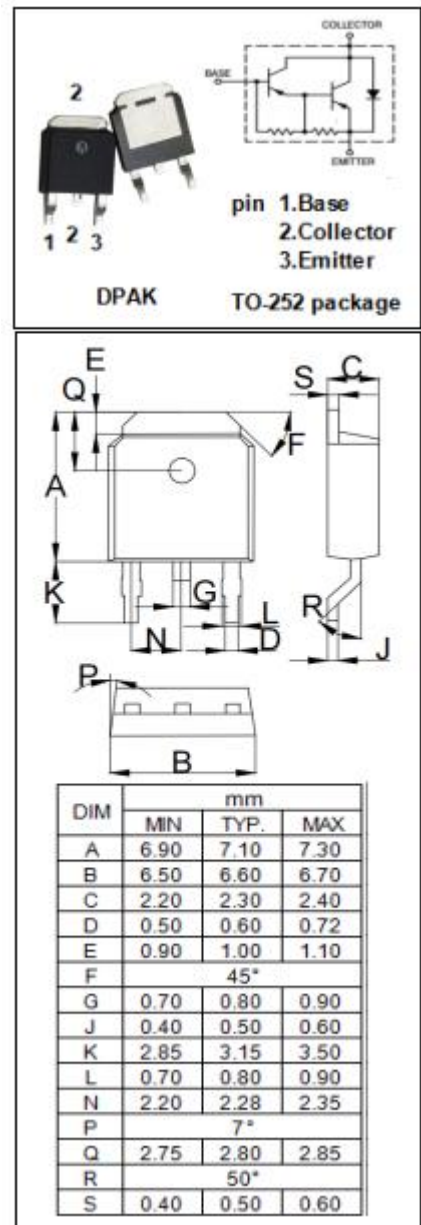
- High-Voltage Switching

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	-100	V
V _{CEO}	Collector-Emitter Voltage	-100	V
V _{EB0}	Emitter-Base Voltage	-5	V
I _C	Collector Current-Continuous	-8	A
I _{CM}	Collector Current-Peak	-15	A
I _B	Base current	-1	A
P _C	Collector Power Dissipation @T _C =25°C	2.0	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	1.56	°C/W



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ELECTRICAL CHARACTERISTICS (T_C=25°C unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO}	Collector-Emitter Breakdown Voltage	I _C = -30mA; I _B = 0	-100	--	V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -3A; I _B = -6mA	--	-2.0	V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -8A; I _B = -80mA	--	-2.5	V
V _{BE(on)}	Base-Emitter Saturation Voltage	I _C = -8A; V _{CE} = -4A	--	-2.8	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -100V; I _E = 0	--	-50	uA
I _{CEO}	Collector Cutoff Current	V _{CE} = -50V; I _B = 0	--	-50	uA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0	--	-8	mA
h _{FE-1}	DC Current Gain	I _C = -3A ; V _{CE} = -4V	1000	20000	
h _{FE-2}	DC Current Gain	I _C = -8A ; V _{CE} = -4V	200	--	

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