

isc Silicon NPN Power Transistor
FJD5555
DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 400V(\text{Min.})$
- Fast Speed Switching
- Wide safe operating Area
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device
Performance and reliable operation

APPLICATIONS

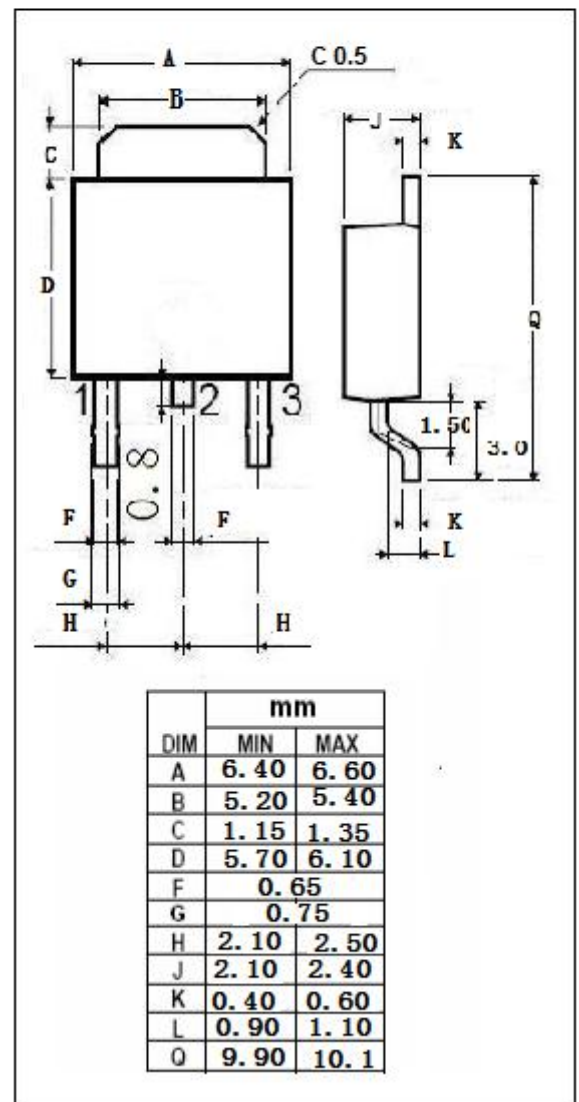
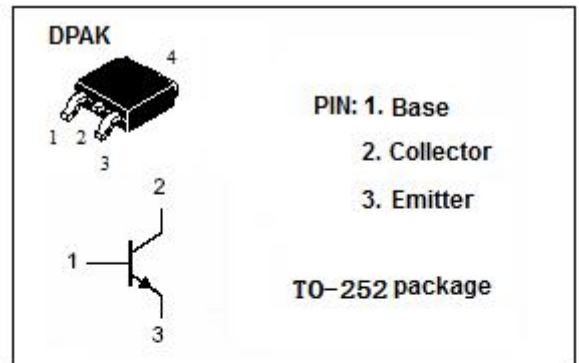
- Designed for electronic ballast application

ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1050	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	14	V
I_C	Collector Current-Continuous	5	A
I_{CM}	Collector Current-Peak	10	A
I_B	Base Current	2	A
I_{BM}	Base Current-Peak	4	A
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	1.34	W
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-A}$	Thermal Resistance, Junction to Ambient	95	$^\circ\text{C/W}$



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
BVCEO	Collector-Base Breakdown Voltage	I _C =500μA, I _E =0	1050			V
BVCEO	Collector-Emitter Breakdown Voltage	I _C =5mA, I _B =0	400			V
BVEBO	Emitter-Base Breakdown Voltage	I _E =500μA, I _C =0	14			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 1A; I _B = 0.2A			0.5	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 3.5A; I _B = 1.0A			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 3.5A; I _B = 1.0A			1.2	V
h _{FE-1}	DC Current Gain	I _C = 10mA; V _{CE} = 5V	10			
h _{FE-2}	DC Current Gain	I _C = 0.8A; V _{CE} = 3V	20		40	
Cob	Output Capacitance	V _{CB} =10V, f=1MHz		45		pF

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