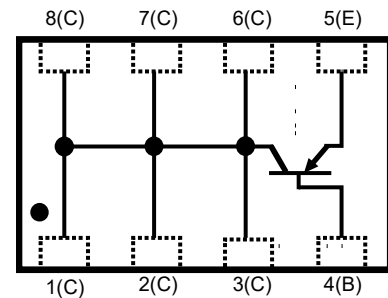


Feature

This device is Pb-Free, Halogen Free/BFR Free and RoHS compliant.

- Very low collector to emitter saturation voltage
- DC current gain >100
- 3A continuous collector current
- PNP epitaxial planar silicon transistor



Mechanical Characteristics

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260°C
- Device meets MSL 1 requirements
- Pin flatness:≤3mil

Electrical characteristics per line@25°C (unless otherwise specified)

Parameter	Symbol	Conditions	Value	Units
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_B=0$ $I_C=-10mA$	-32	V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_E=0$ $I_C=-100uA$	-48	V
Emitter -Base Breakdown Voltage	$V_{(BR)EBO}$	$I_C=0$ $I_E=-100uA$	-6	V
Collector Current	I_C		-3	A
Collector Peak Current ⁽¹⁾	I_{CM}		-6	A
Base Current	I_B		-0.2	A
Base Peak Current	I_{BM}		-0.5	A
Total Dissipation @25°C ⁽²⁾	P_{tot}		3.0	W
Storage Temperature	T_{stg}		-65~150	°C
Max. Operating Junction Temperature	T_j		150	°C
Junction-to-Ambient Thermal Resistance ⁽²⁾	$R_{\theta JA}$		42	°C/W

Note 1: Pulse width=300µs, Duty Cycle<2%

Note 2: Surface mounted on FR-4 Board using 1 square inch pad size, 1oz copper

Absolute maximum rating@25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
DC Current Gain	h_{FE}	$I_C=-500mA, V_{CE}=-3.0V$	150			-
		$I_C=-1A, V_{CE}=-5V$	100			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-0.5A, I_B=-50mA$			-0.18	V
		$I_C=-1.2A, I_B=-20mA$			-0.3	
		$I_C=-2A, I_B=-200mA$			-0.45	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-1A, I_B=-50mA$			-1.1	V
		$I_C=-2A, I_B=-200mA$			-1.2	
Collector Cut-off Current ($I_E=0$)	I_{CBO}	$V_{CB}=-30V$			-100	nA
Emitter Cut-off Current ($I_C=0$)	I_{EBO}	$V_{EB}=-5V$			-100	nA

Typical Characteristics

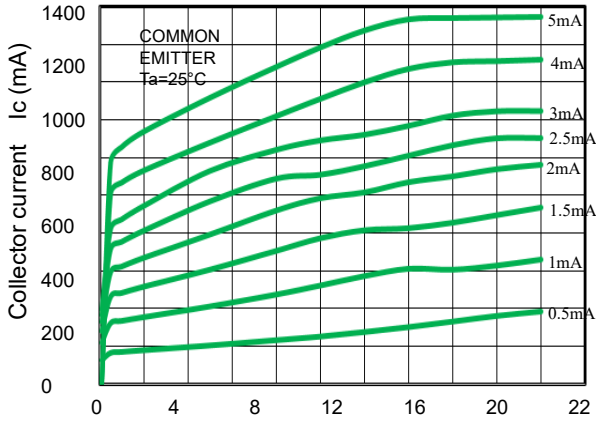


Fig1. Collector-emitter voltage V_{CE} (V)

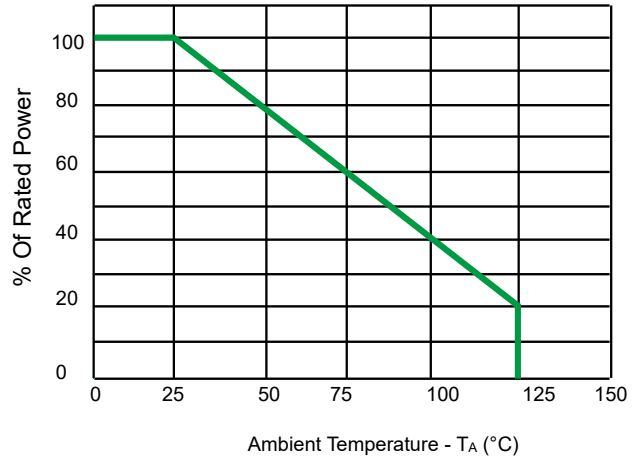


Fig2. Power Derating Curve

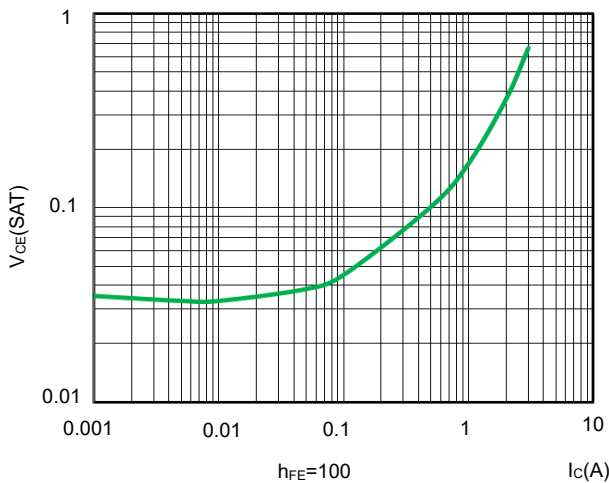


Fig 3. Collector-Emitter Saturation Voltage

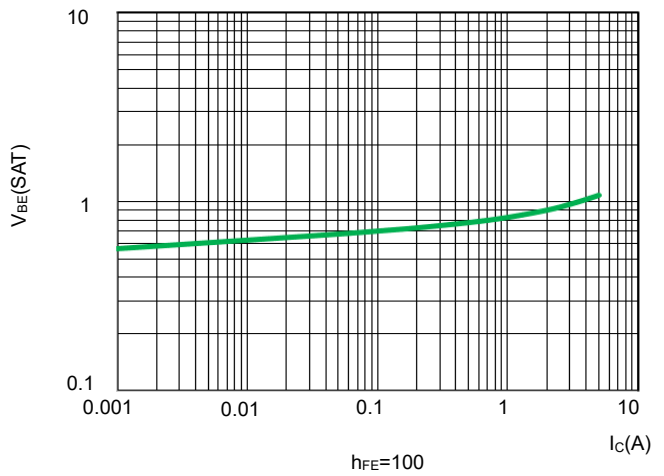


Fig4. Base-Emitter Saturation Voltage

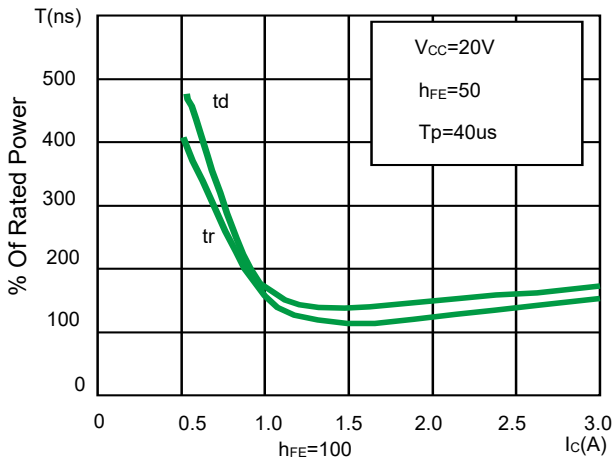


Fig 5. Switching Times Resistive Load

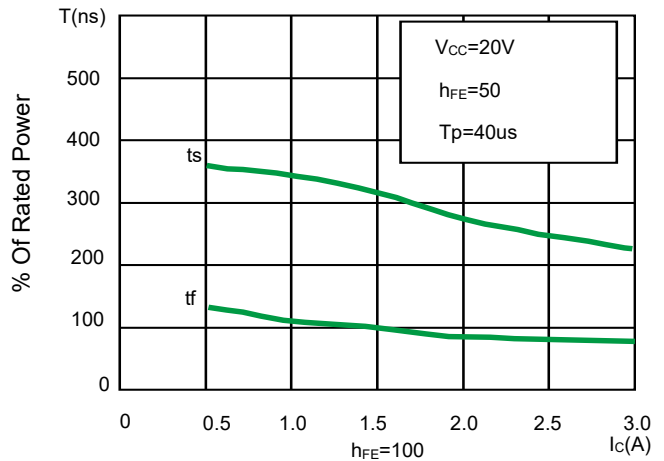
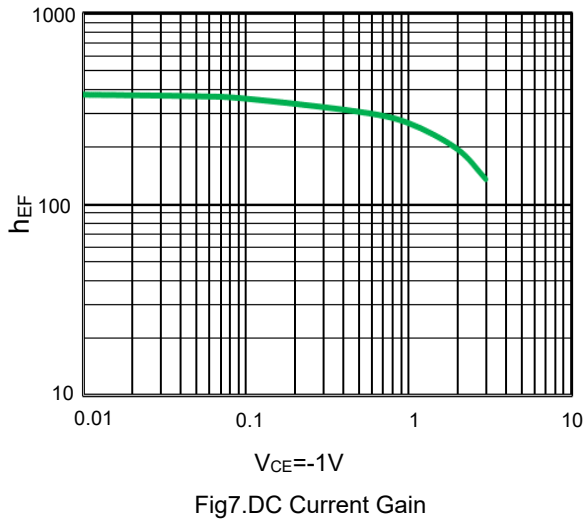
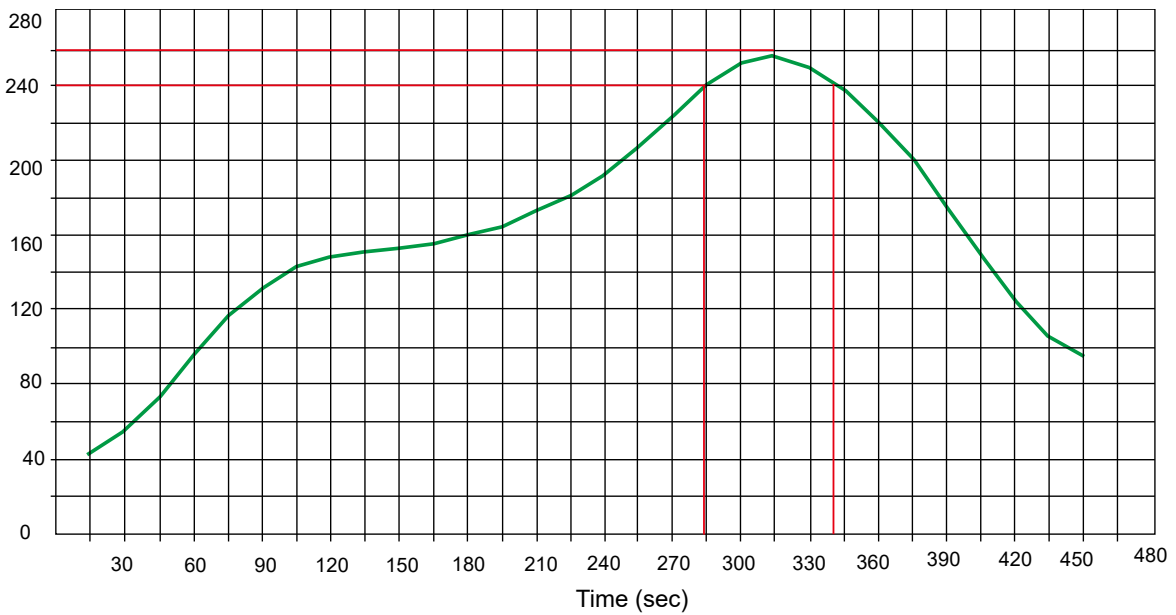


Fig6. Switching Times Resistive Load

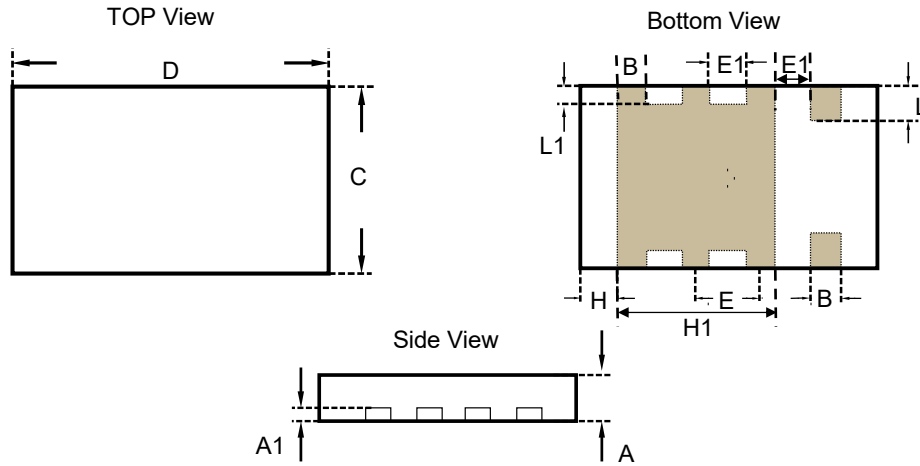


Solder Reflow Recommendation

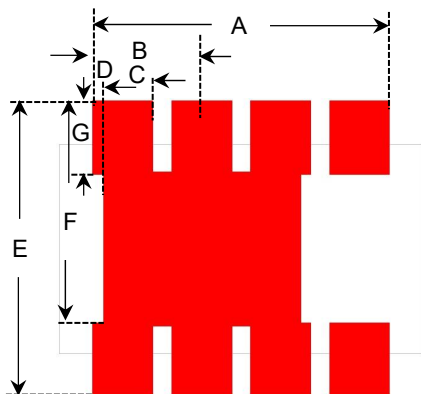
Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



Product dimension (DFN3x2-8L)

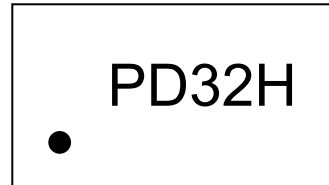


Dim	Millimeters		
	MIN	TYP	MAX
A	0.500	0.570	0.650
A1	0.077	0.140	0.200
D	2.900	3.000	3.100
C	1.900	2.000	2.100
E	0.550	0.650	0.750
E1	0.300	0.350	0.400
L	0.450	0.500	0.550
L1	0.350	0.400	0.450
H	0.300	0.375	0.450
H1	1.550	1.650	1.750
B	0.250	0.300	0.350



Dim	Millimeters	
	MIN	MAX
A	2.45	--
B	0.90	--
C	0.50	--
D	0.05	--
E	2.50	--
F	1.90	--
G	0.60	--


Marking information



Ordering information

Device	Package	Reel	Shipping
PPT8N30E2H	DFN3x2-8L(Pb-Free)	7"	3000 / Tape & Reel


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