"Yت / Descriptions

TO-247

Insulated-Gate Bipolar Transistor in a TO-247 Plastic Package.

◕ È / Features

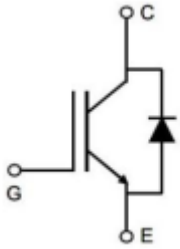
V_{CES} =650V I_C (T_C=100)=75A

$V_{CE(SAT)}$= 2.00V(typ.) @V_{GE}=15V,I_C= 75A

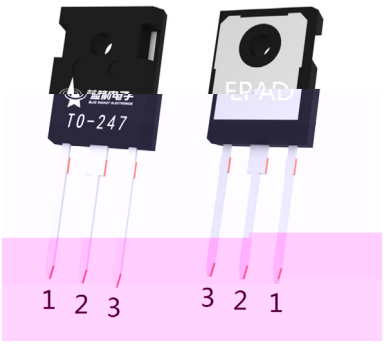
٧ ٍ / Applications

Motor driver, Uninterrupted Power Supply, , Portable power station.

Л ̃ ̊ ̈ ≠ ع / Equivalent Circuit



ã ﻉ ٗ / Pinning



PIN1 G PIN 2 EPAD C PIN 3 E

ﻁ. ʜ ؛ / Marking

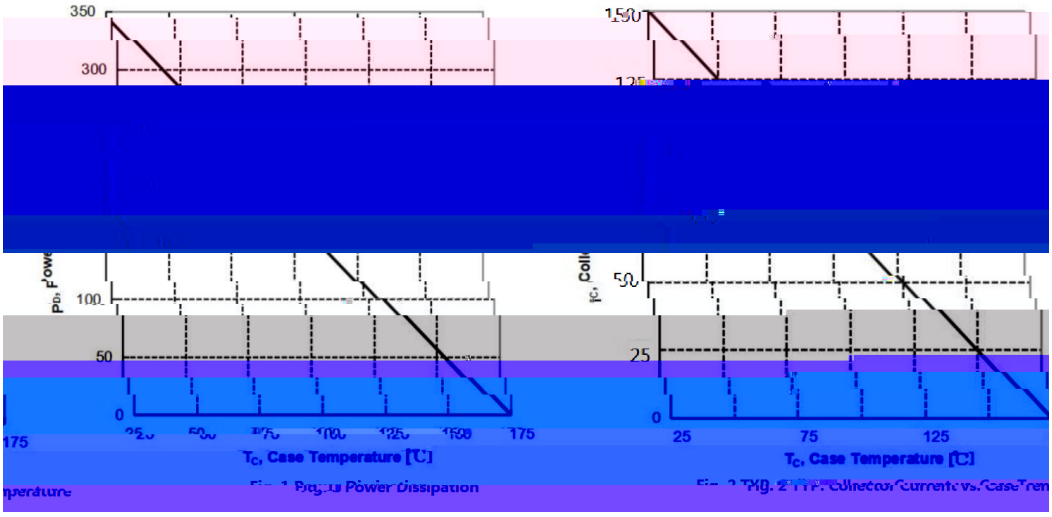
See Marking Instructions.

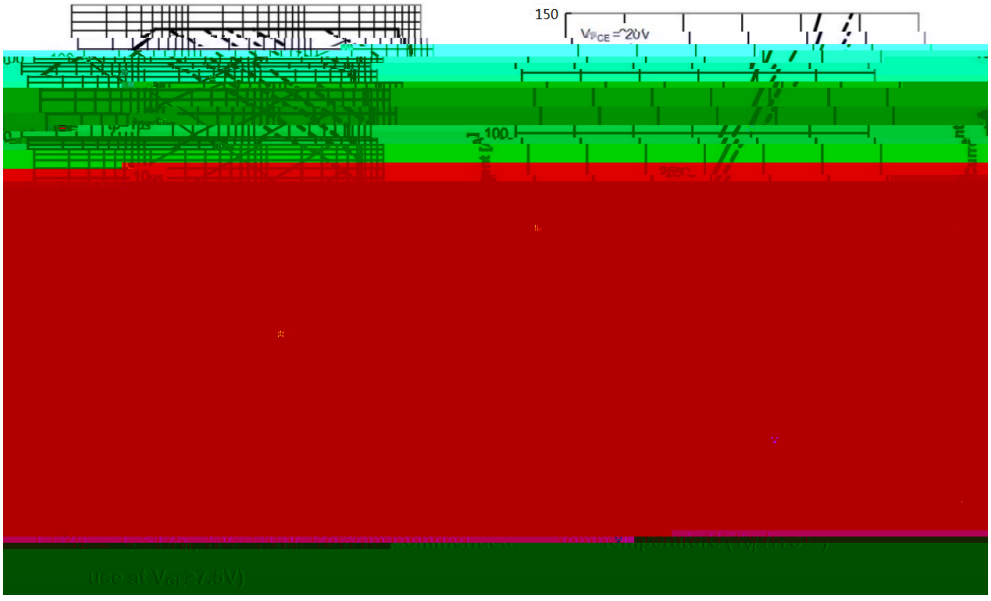
r		Symbol	Rating	Unit
		V_{CES}	650	V
		V_{GES}	30	V
t	T_C=25	I_C	150	A
	T_C=100		75	A
mited by T_{Jmax}		I_{CM}	300	A
	T_C=25	I_F	150	A
	T_C=100		75	A
ward Current		I_{FRM}	300	A
		t_{sc}	8	μs
	T_C=25	P_D	341	W
Soldering		T_L	260	
ture Range		T_J	-40 to +175	
		T_{STG}	-55 to +175	
nt		$R_{\theta JA}$	40	/W
Case		$R_{\theta JC}$	0.55	/W
Case		$R_{\theta JC}$	1.44	/W

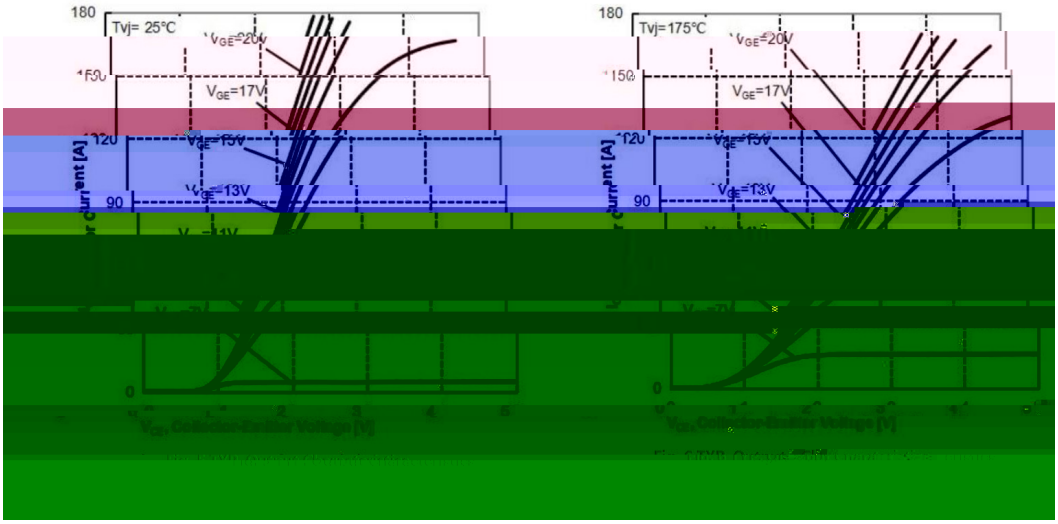
	Symbol	Test Conditions		Min	Typ	Max	Unit
	BV_{CES}	I_C=1mA, V_{GE}=0V		650			V
rrent	I_{CES}	V_{CE}=650V, V_{GE}=0V				10	uA
	I_{GES}	V_{CE}=0V, V_{GE}= ±20V				200	nA
e	$V_{GE(th)}$	I_C=1.0mA, V_{GE}=0V		4.3	5.3	6.3	V
oltage	$V_{CE(sat)}$	V_{GE}=15V, I_C=75A	T_J=25		2.00	2.30	V
			T_J=125		2.23		
			T_J=175		2.37		
	Q_g	V_{GE}=15V, V_{CC}=520V I_C=75A			167		nC

Unit
ns
ns
ns
ns
ns
ns
ns
ns
mJ
mJ
mJ

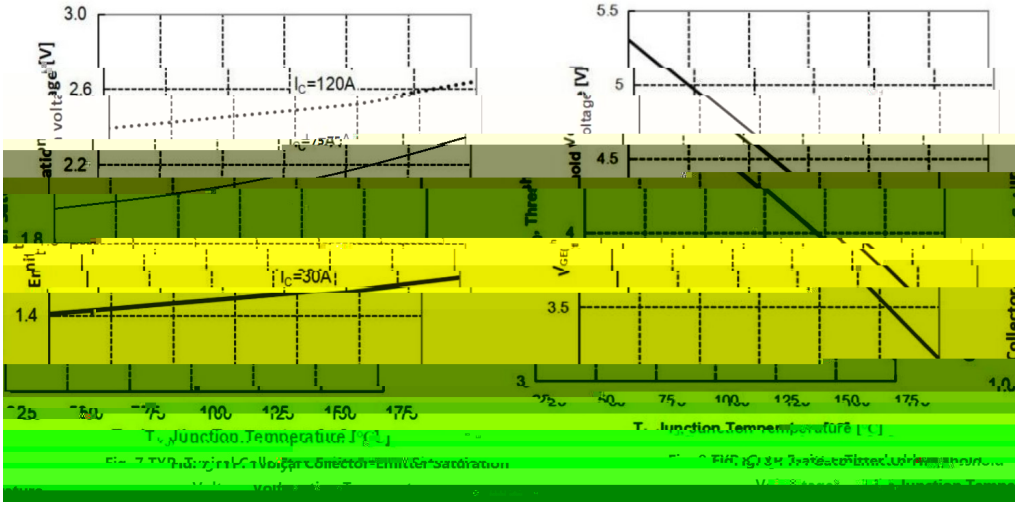
≠ ∃ ̃Ạ´E ∀ ∱ / Electrical Characteristic Curve

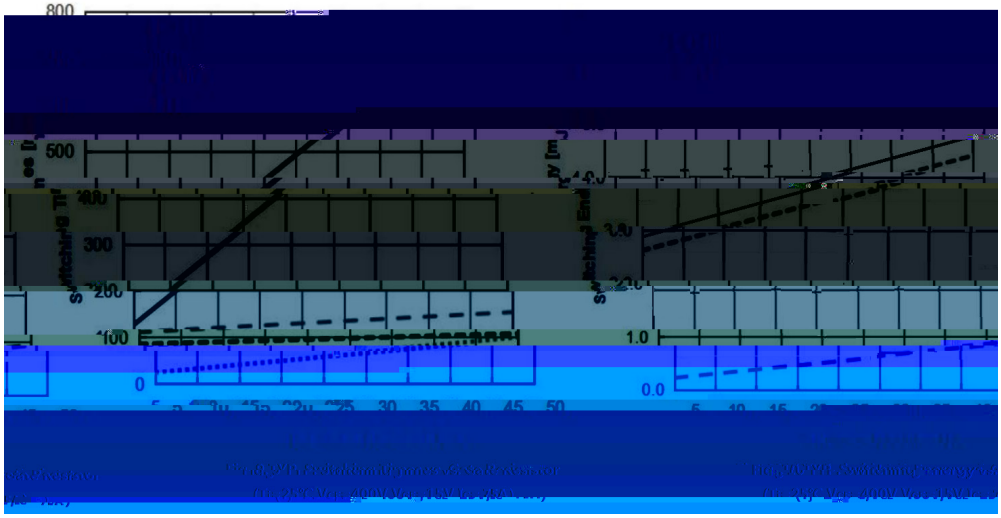


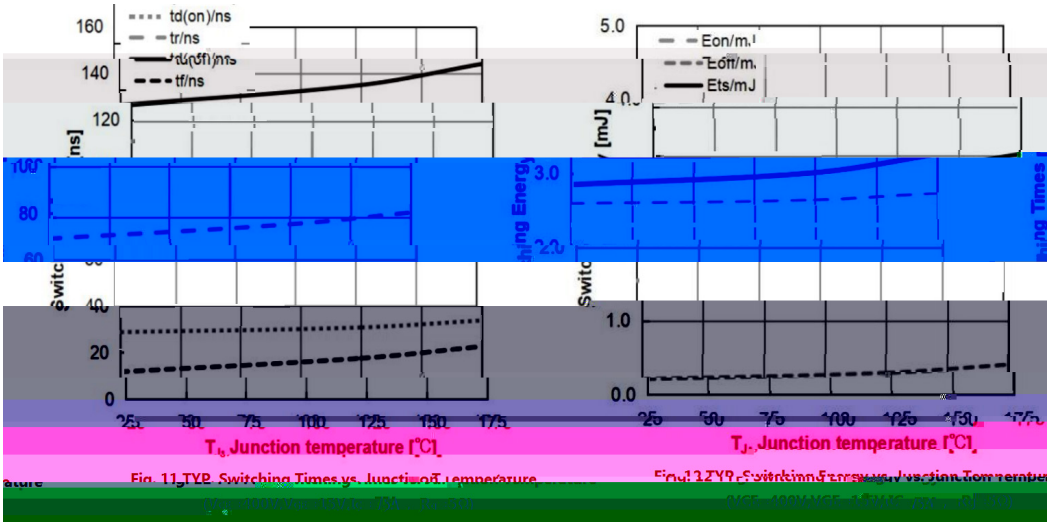




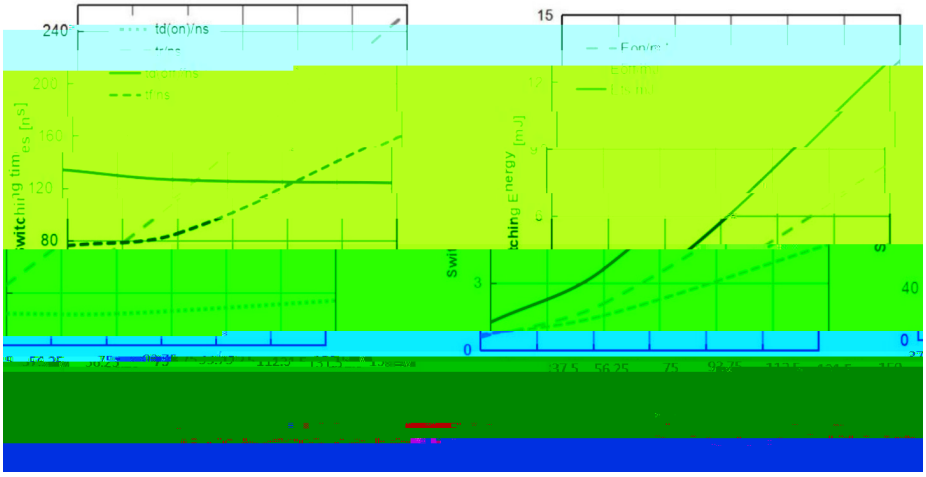
≠ Ǝ ̃Ạ ́E ᛋ ƒ / Electrical Characteristic Curve

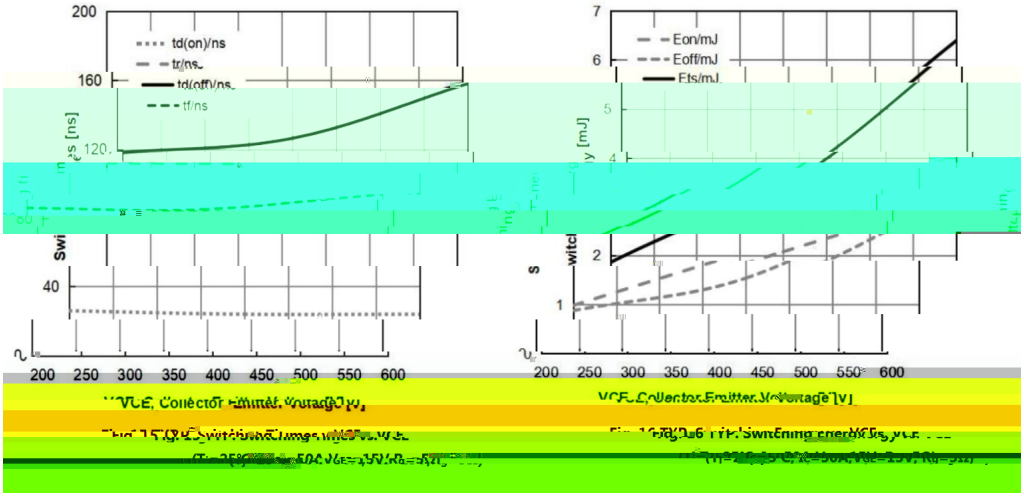


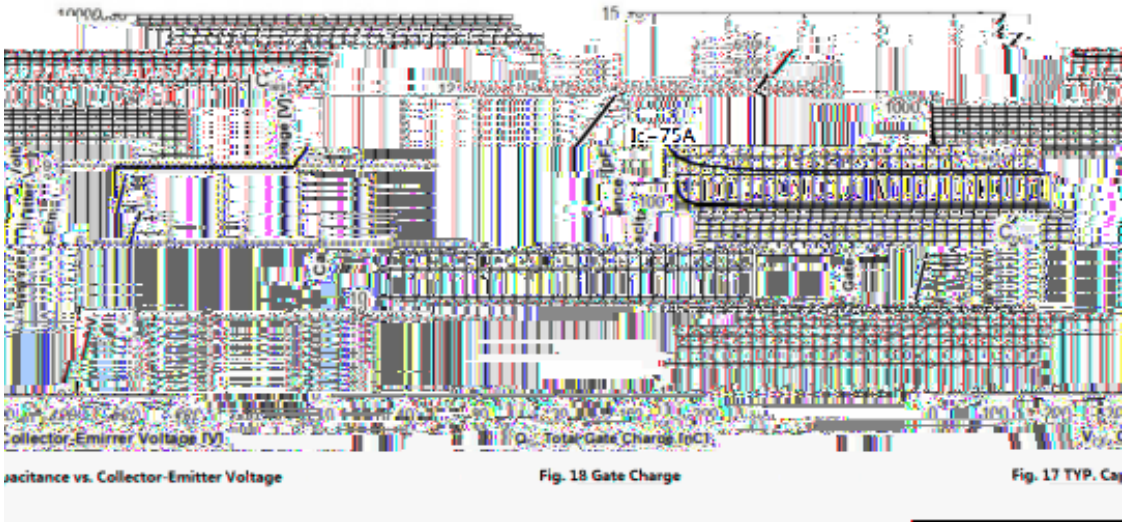




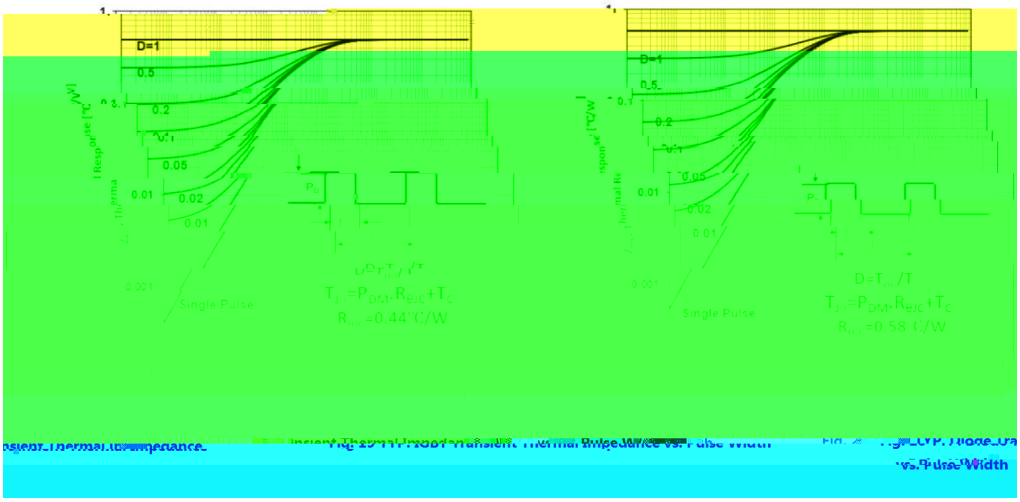
⁄ ∃ ˜Ą´E ¼ ƒ / Electrical Characteristic Curve

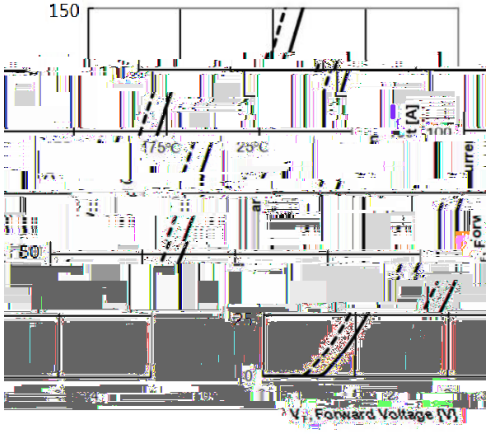






≠ ∃ Ã´E ∀ ƒ / Electrical Characteristic Curve

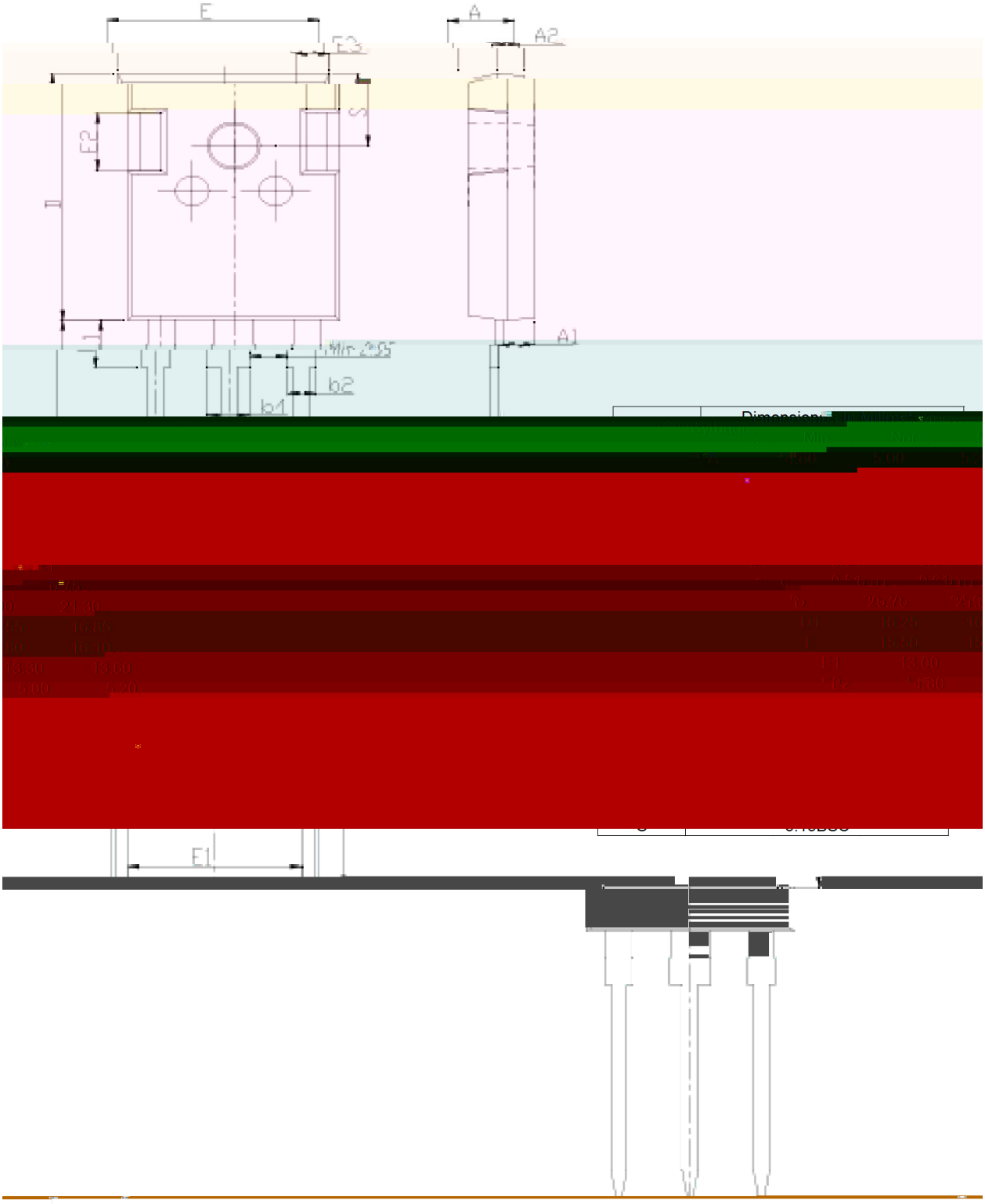




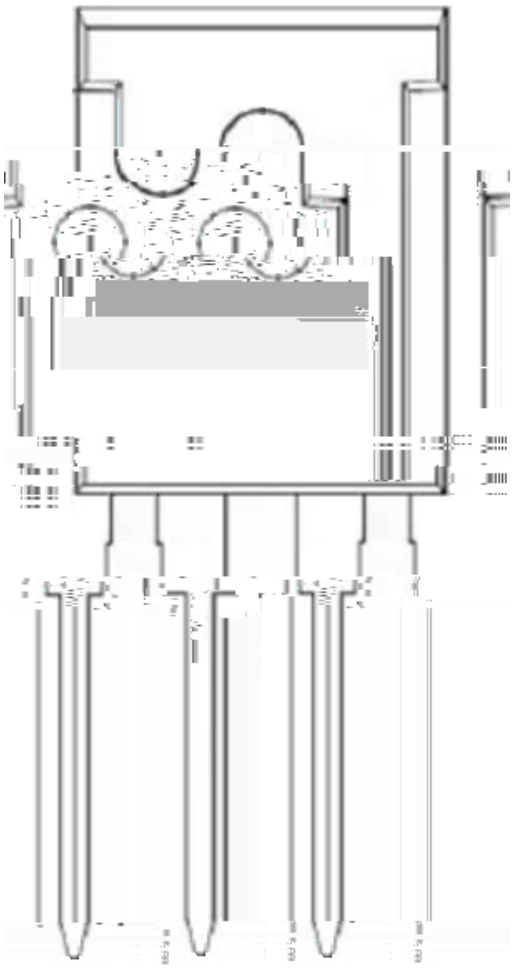
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Fig. 21 TYP. Forward characteris

ᵘ Ė Ò Ļ ʃ / Package Dimensions



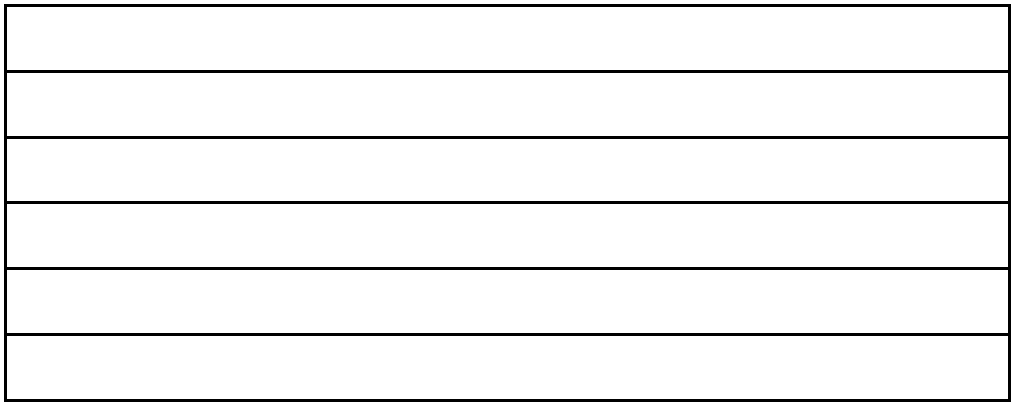
ł. Ļ‘Ω / Marking Instructions



BR

GB75L65AH Ÿ ′ ‘ ŒE

↓ ș ╕ẘ´E ᛋ ƒ (ᾠ ᴣ) / Temperature Profile for Dip Soldering(Pb-Free)



Note:

1	25	150	60	90sec;
2	255±5			5±0.5sec;
3		2	10	/sec.

1.Preheating:25~150 , Time:60~90sec.
2.Peak Temp.:255±5 , Duration:5±0.5sec.
3. Cooling Speed: 2~10 /sec.

ᛋ ŭ ɋ ̄ `Y Ţ / Resistance to Soldering Heat Test Conditions

270±5	10±1 sec.	Temp.:270±5	Time:10±1 sec

ɒ Ŀ ᴄ— / Packaging SPEC.

/ TUBE

Package Type	Units					Dimension		(unit mm³)
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-247	30	15	450	5	2250	520×44×6	580×158×55	595 300 178