TO-220 ḾḾ Ḅ N ʚ ʃ ѽ Ẓ ᶘ

N-CHANNEL MOSFET in a TO-220 Plastic Package.

V_{DS}=100V I_D=120A

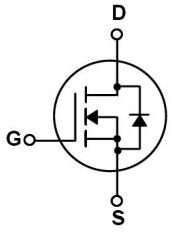
$R_{DS(on)}$@10V≤5.5mΩ(Type.4.7mΩ)

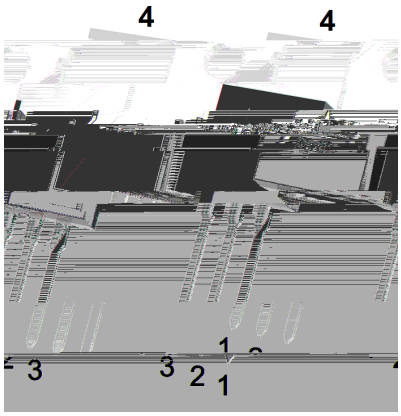
$R_{DS(on)}$@4.5V≤7.0mΩ(Type.6.0mΩ)

ḛ ꜰ β HF Product.

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High frequency switching and synchronous rectification,BMS,Motor.





PIN1 χ G PIN 2 4 χ D PIN 3 χ S

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See Marking Instructions.

v ̈Ω Parameter		ϒ N Symbol	̈Ω Ө Rating	D Ң Unit
Drain-Source Voltage		V_{DSS}	100	V
Drain Current		I_D(Tc=25)	120	A
Pulsed Drain Current		I_{DM}	255	A
Gate-Source Voltage		V_{GS}	± 20	V
Single Pulsed Avalanche Energy(L=0.5mH)		E_{AS}	883.6	mJ
Avalanche Current		I_{AS}	47	A
Total Power Dissipation		P_D(Tc=25)	140	W
Junction and Storage Temperature Range		T_J,T_{STG}	-55 to 150	
Thermal Resistance-Junction to Ambient	t ≤ 10s	$R_{\theta JA}$	20	ł /W
	Steady-State		75	
Thermal Resistance-Junction to Case		̈Ω Ө		

Symbol

v ̈Ω Parameter	ϟ ᴺ Symbol	╨ ⁝↑ ϯ Test Conditions	ѡ ṇ Ө Min	Ɛ ȝ Ө Typ	ѡ ᶻ Ө Max	ᴅ Ꮋ Unit
Turn-On Delay Time	$t_{d(on)}$			28.3		
Turn-On Rise Time	t_r	V_{GS}=10V V_{DS}=50V R_L=2.5Ω R_{GEN}=3Ω		24		ns
Turn-Off Delay Time	t					

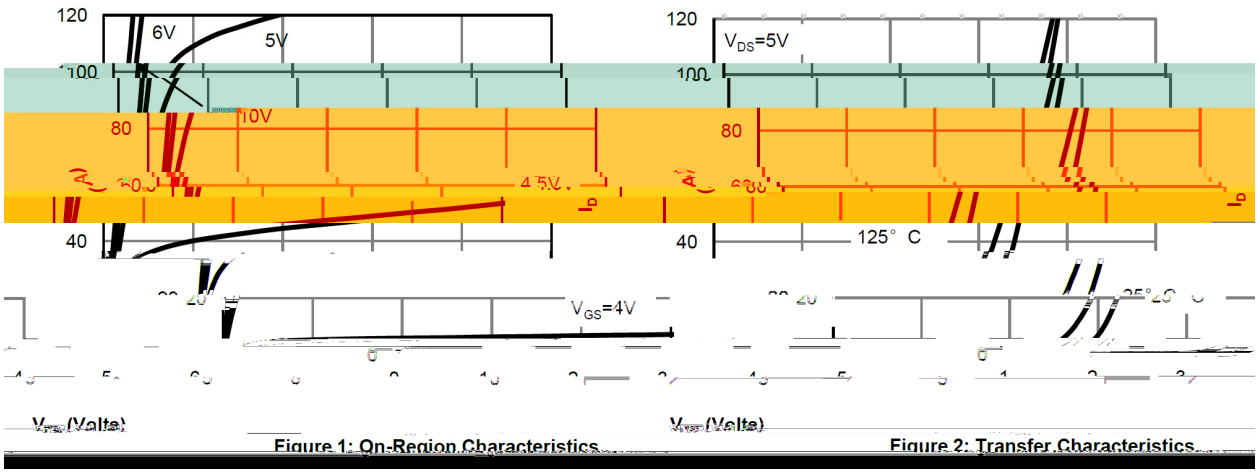
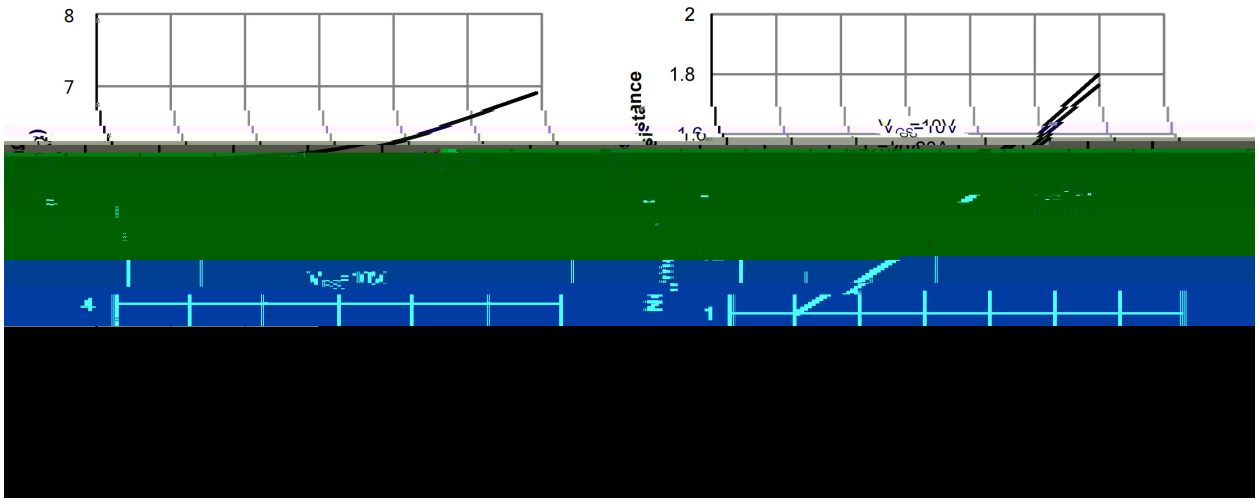
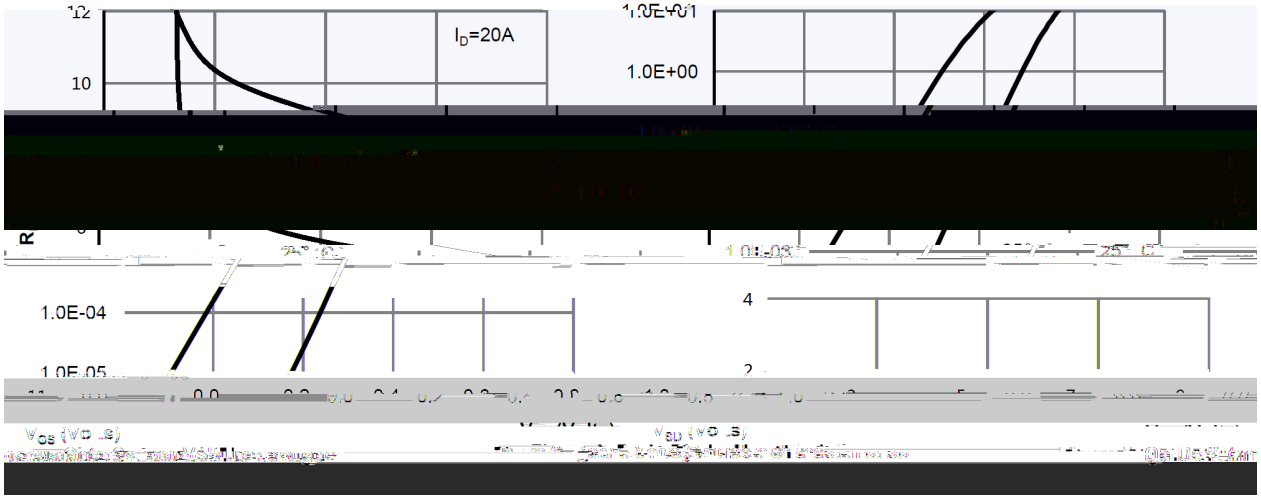
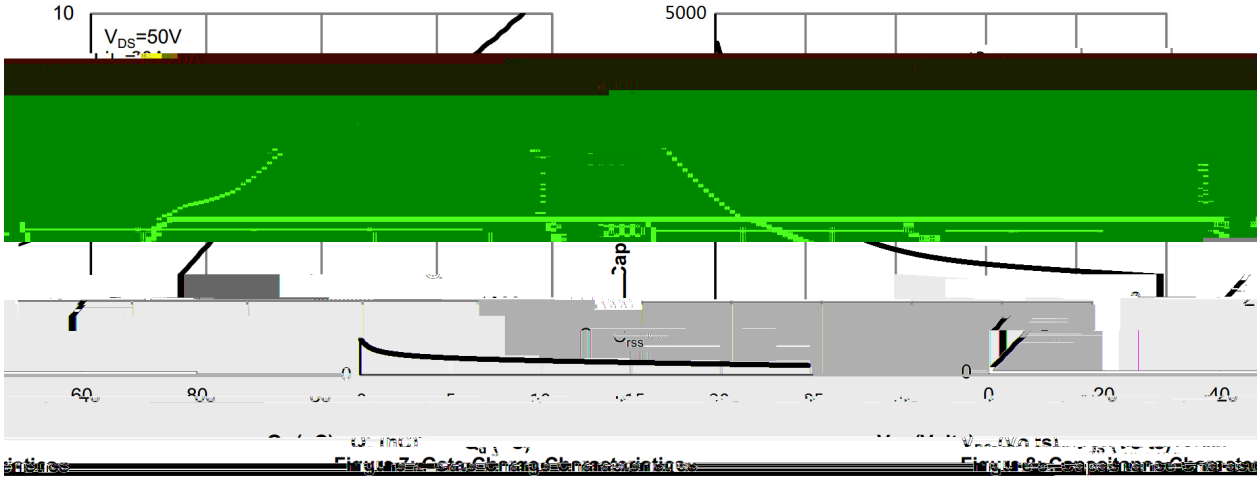


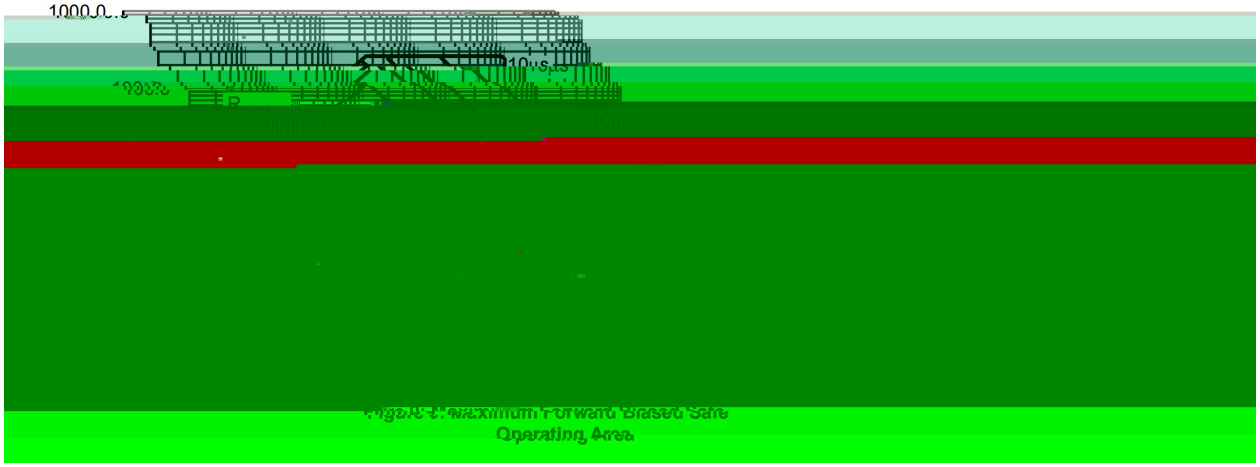
Figure 1: On-Region Characteristics

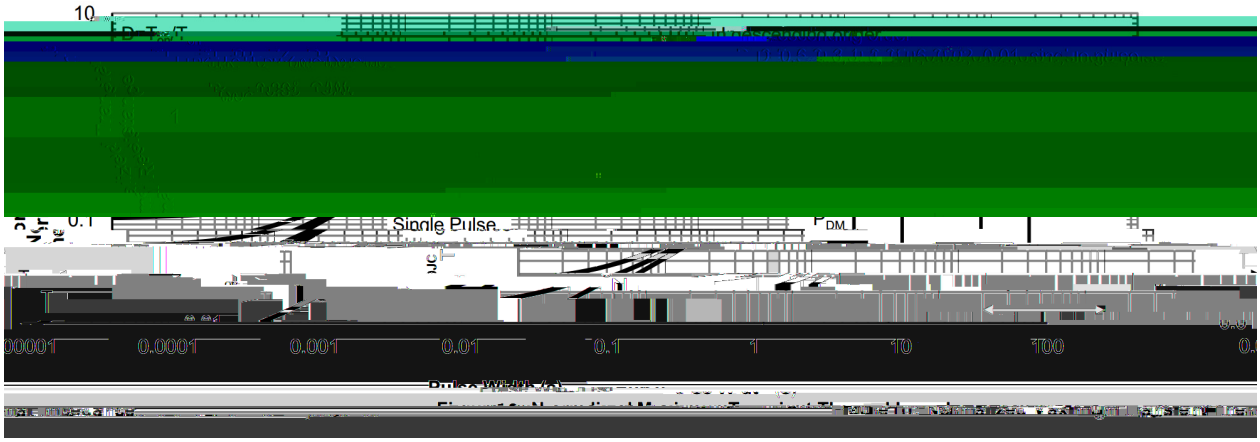
Figure 2: Transfer Characteristics

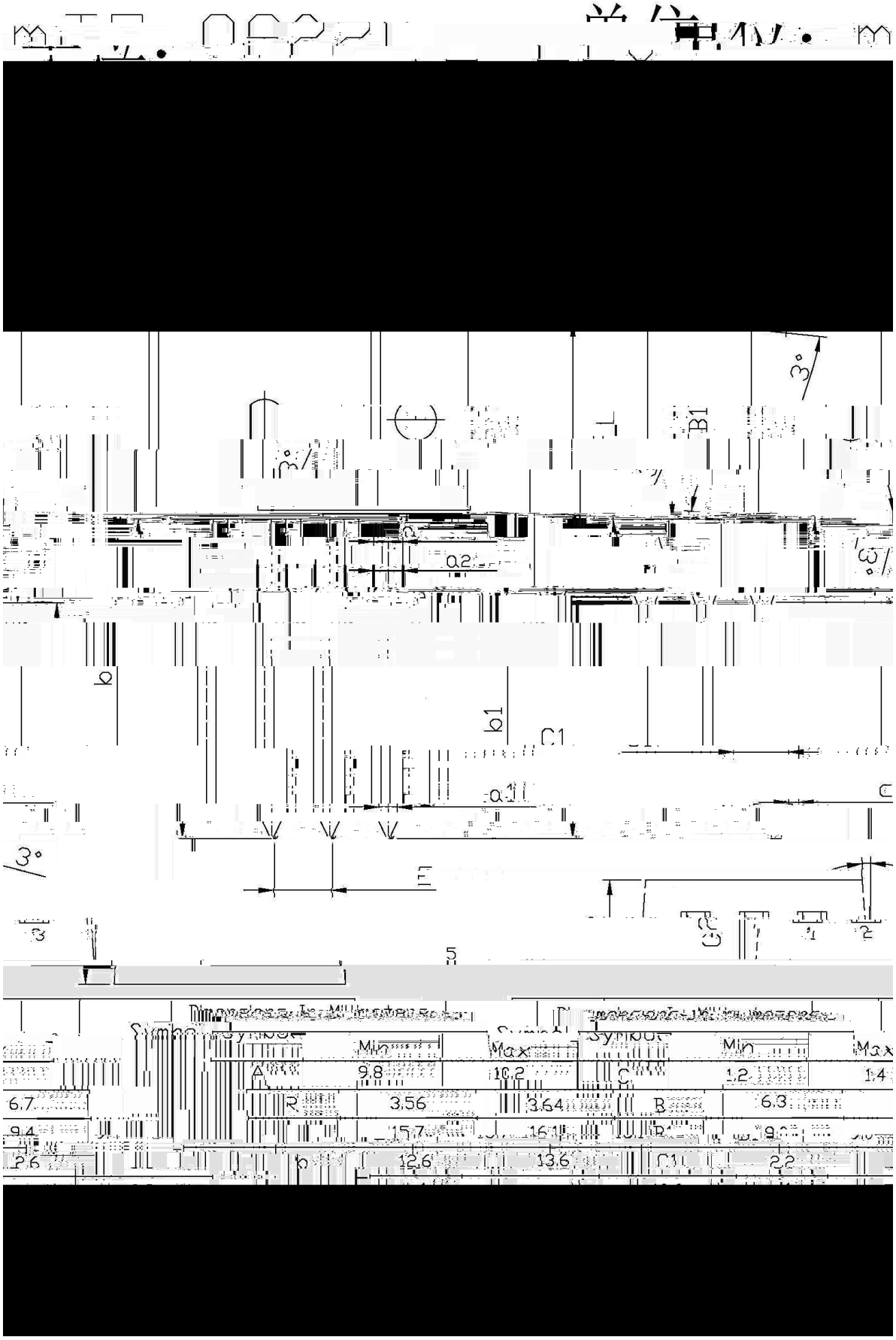


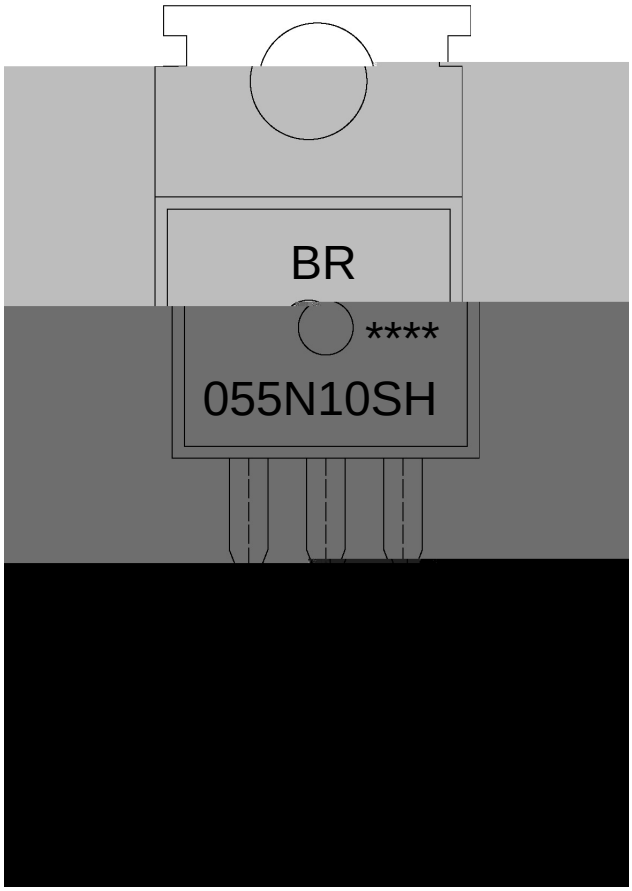



10
V_{DS}=50V
5000
Cap
C_{rss}
0
0
60
80
0
20
40


1000.0
10μs
Operating Area


10
0.1
Single Pulse
P_{DM}
0.00001
0.0001
0.001
0.01
0.1
1
10
100


3°
B1
a2
b
b1
c1
a1
E
3°
3°
5
Min
Max
Min
Max
A
9.8
10.2
C
1.2
1.4
6.7
R
3.56
3.64
B
6.3
9.4
15.7
16.1
9
2.6
b
12.6
13.6
c1
2.2



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EU ؤ ﺱﺵ ﺡ ﻍ ﻥ ﻕ

388Q43VK ؤ ﺱﺵ ﺟ ﻍ ﻥ ﻕ

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Note:

BR:	Company Code
055N10SH:	Product Type Code
****:	Lot No. Code, code change with Lot No

ب ˝ χ

1 Ĺ ♬ □ ỷ 25 Ḱ 150 ł ı `H ڑ 60 Ḱ 90sec;

2 Š Ө □ ỷ 255 ° 5 ł ı `H ڑ `Y ٨ ѭ 5 ° 0.5sec;

3 ì ˙ ٧ ˛ ɔ ﻩ ỷ ѭ 2 Ḱ 10 ł /sec.

Note:

1.Preheating:25~150 ł , Time:60~90sec.

2.Peak Temp.:255 ° 5 ł , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ł /sec.

□ ỷ χ 270 ° 5 ł `H ڑ χ 10 ° 1 sec. Temp.:270±5 Time:10±1 sec

¨Ω ţ ץ Ł / BULK

Package Type	Units					Dimension		(unit mm³)
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

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Package Type