v ‴Ω Parameter		ϒ N Symbol	‴Ω Θ Rating	D Ч Unit
Drain-Source Voltage		V_{DS}	-30	V
Drain Current - Continuous		I_D(T_c=25)	-30	A
Drain Current – Pulsed		I_{DM}	-92	A
Gate-Source Voltage		V_{GS}	± 20	V
Power Dissipation		P_D(T_c=25)	28	W
Single Pulse Avalanche Energy(L=0.5mH)		E_{AS}	152	mJ
Avalanche Current(L=0.5mH)		I_{AS}	19.5	A
Junction and Storage Temperature Range		T_j, T_{stg}	-55 to 150	ł
Thermal resistance, junction - ambient	t ≤ 10s	$R_{\theta JA}$	28	/ W
	Steady-State		62	
Thermal resistance, junction - case	Steady-State	$R_{\theta JC}$	4.5	

/ Electrical Characteristics(Ta=25)

v ̈Ω Parameter	ϒ N Symbol	⅄ ;↑ ϯ Test Conditions	ѡ ṇ Ө Min	Ɛ ȝ Ө Typ	ѡ ᶻ Ө Max	ᴅ Ꮋ Unit
Turn-On Delay Time	$t_{d(on)}$	V_{GS}=-10V V_{DS}=-15V R_L=1.5Ω R_{GEN}=3Ω		10		ns
Turn-On Rise Time	t_r			5.5		
Turn-Off Delay Time	$t_{d(off)}$			26.1		
Turn-Off Fall Time	t_f			9.1		

/ Electrical Characteristic Curve

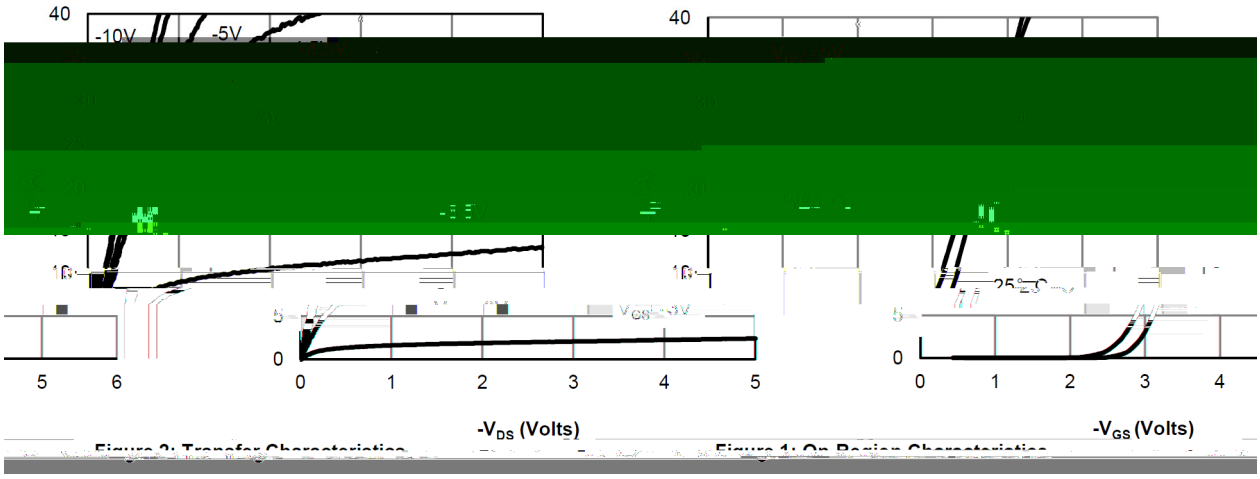
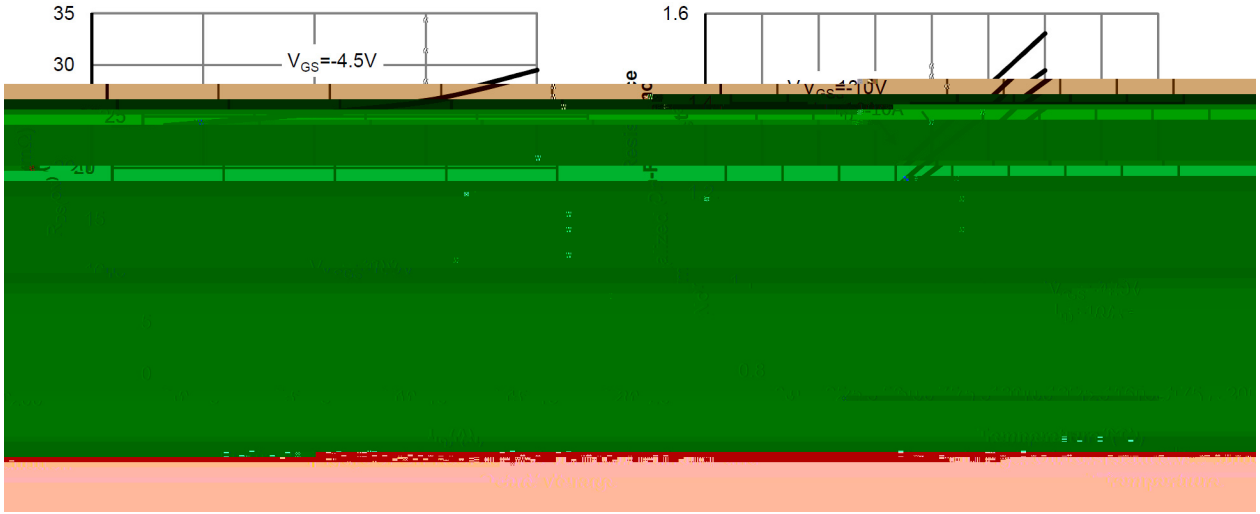
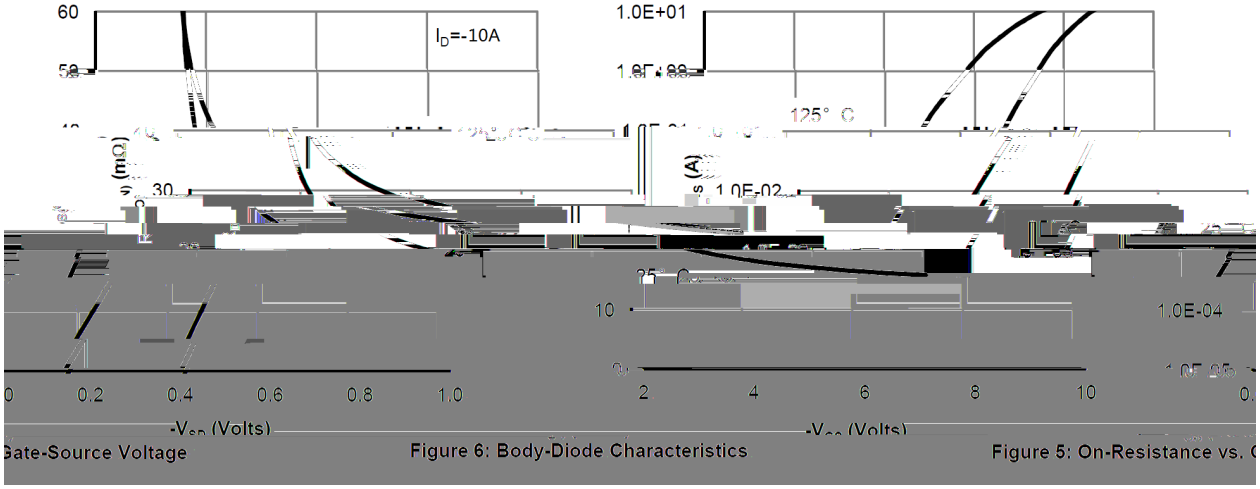


Figure 3: Transfer Characteristics

Figure 1: On-Region Characteristics





Gate-Source Voltage

Figure 6: Body-Diode Characteristics

Figure 5: On-Resistance vs.

/ Electrical Characteristic Curve

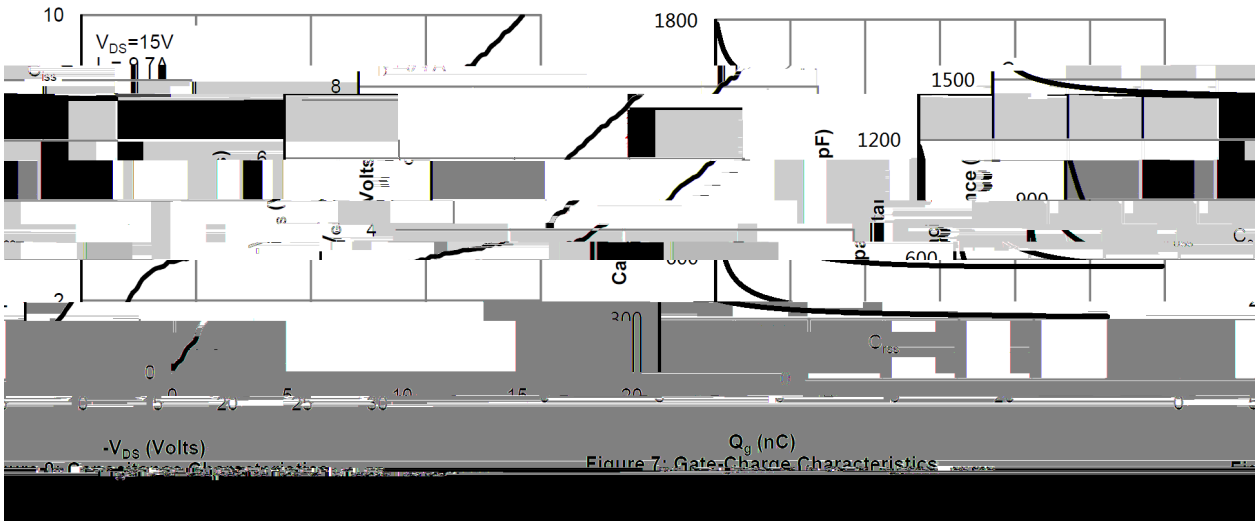


Figure 7: Gate-Charge Characteristics

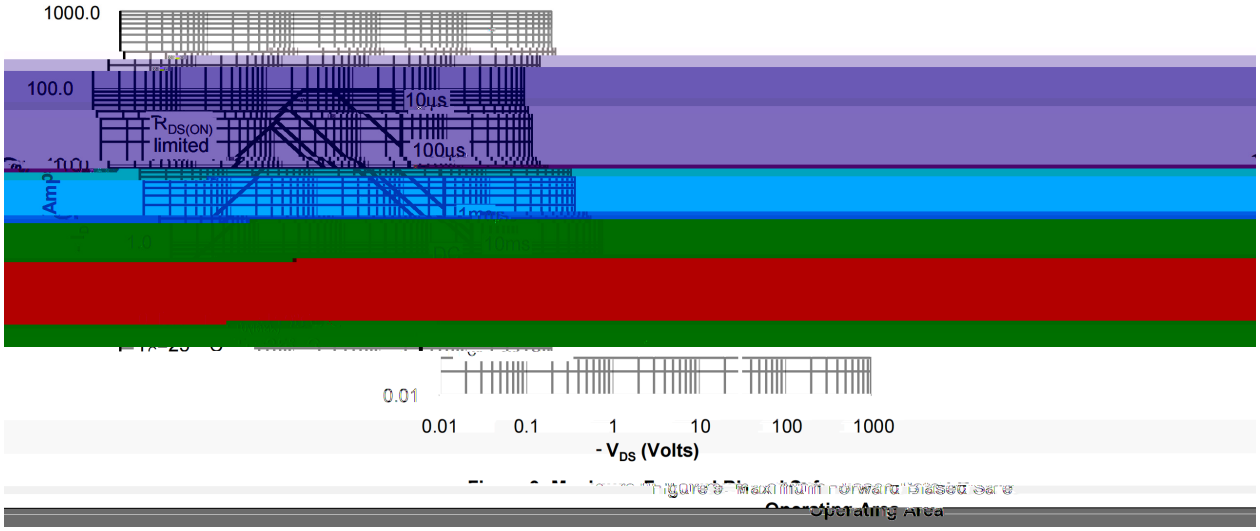
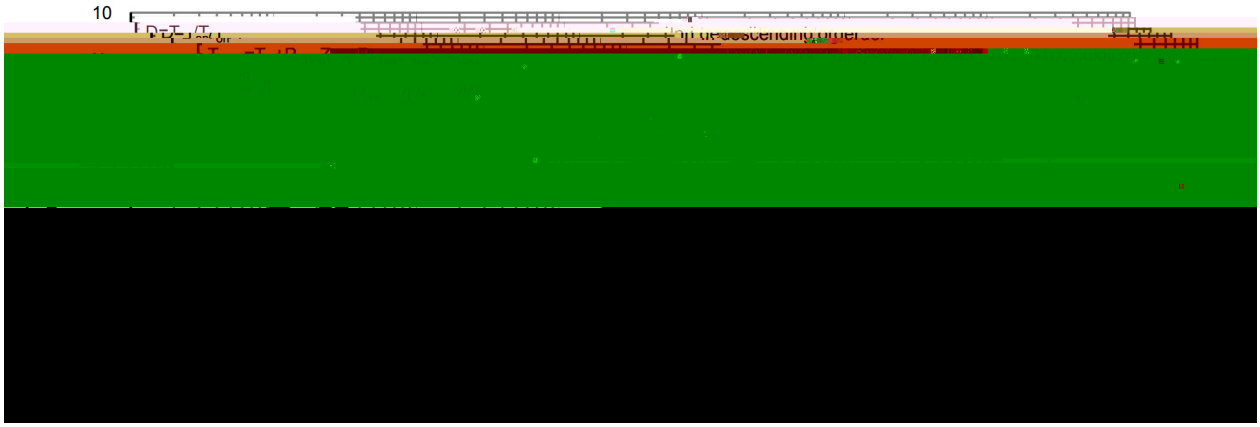
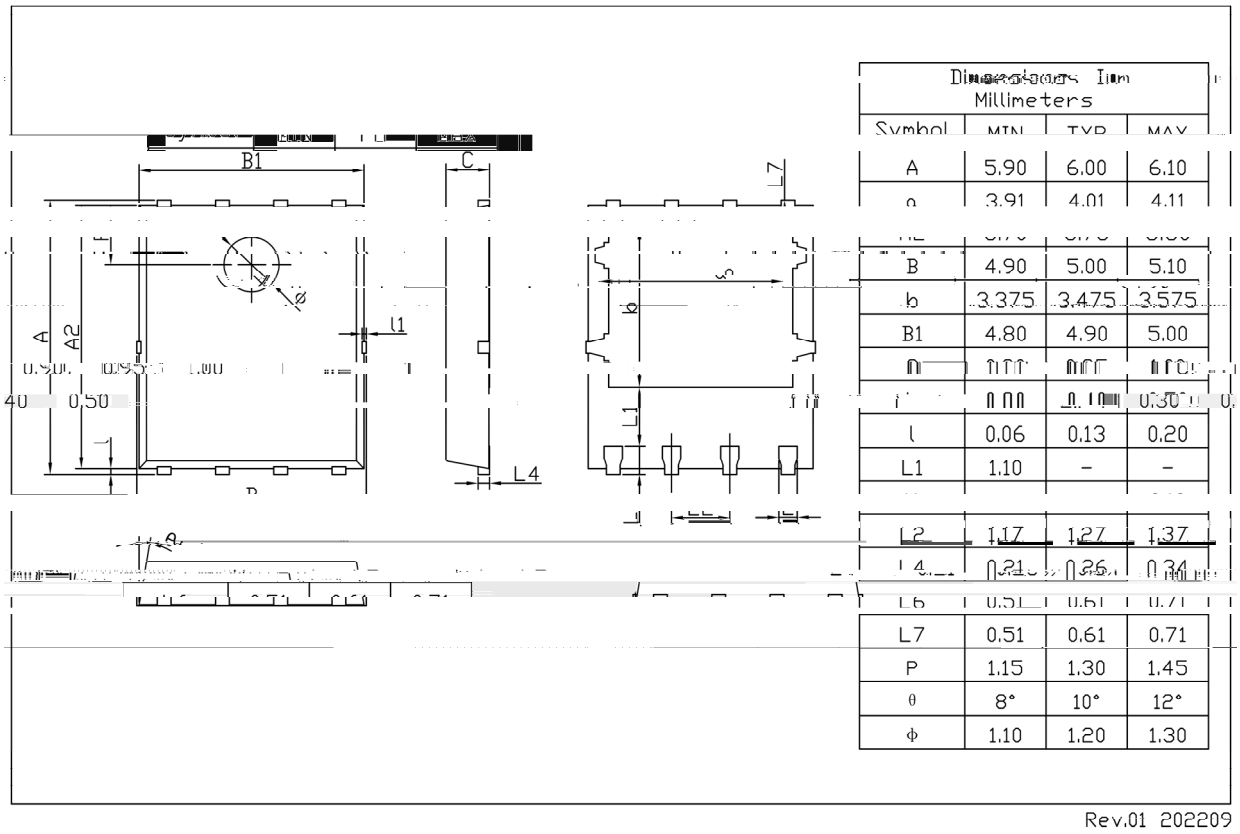


Figure 8: Maximum Forward Biased Safe Operating Area



/ Package Dimensions

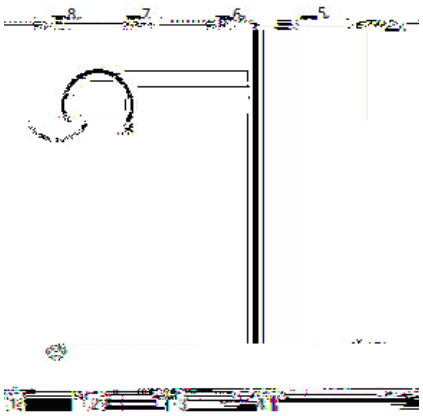
PDFN5×6 Unit:mm



Dimensions In Millimeters			
Symbol	MIN	TYP	MAX
A	5.90	6.00	6.10
[illegible]	3.91	4.01	4.11
B	4.90	5.00	5.10
b	3.375	3.475	3.575
B1	4.80	4.90	5.00
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	0.30
l	0.06	0.13	0.20
L1	1.10	–	–
[illegible]	[illegible]	[illegible]	[illegible]
L2	1.17	1.27	1.37
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
L7	0.51	0.61	0.71
P	1.15	1.30	1.45
θ	8°	10°	12°
Φ	1.10	1.20	1.30

Rev.01 202209

/ Marking Instructions



ᴗ ˝ χ

EU χ ᵻᵡ ᵡ ᴎ ᴨᵬ

200P03 χ ᵻᵡ ᵴ ᴺ ᴨᵬ

---- χ ᵻᵡ ᵻ ᶠ ᵑ̆ ᴺ ᴨᵬ ᵻ ᵩ ᵻ ᶠ ᵑ̆ ᴺ Ψ ᵖ

Note χ

BR χ

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



ب ˝ χ

1 Ĺ ♬ □ ỷ 150 Ḱ 180 ł ı `H ڑ 60 Ḱ 90sec;

2 Š Ө □ ỷ 245 ° 5 ł ı `H ڑ 'Y ﾊ ㎞ 5 ° 0.5sec;

3 ì ˙ ﾘ ˛ ↄ ﷺ ỷ ㎞ 2 Ḱ 10 ł /sec.

Note:

1.Preheating:150~180 ł , Time:60~90sec.

2.Peak Temp.:245 ° 5 ł , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ł /sec.

/ Resistance to Soldering Heat Test Conditions

□ ỷ χ 260 ° 5 ł	`H ڑ χ 10 ° 1 sec.	Temp.:260±5	Time:10±1 sec

/ Packaging SPEC.

ↄ` ﾔ Ł / REEL

Package Type Ṃ Ł ė Ǎ	Units				Dimension	(unit Ж mm^3)
	Units/Reel Ɛ 2 ↄ `	Reels/Inner Box ↄ ` 2 ¨	Units/Inner Box Ɛ 2 ¨	Inner Boxes/Outer Box ¨ 2 ﾘ		