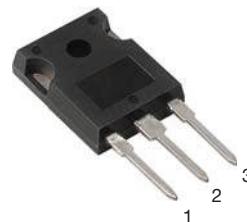
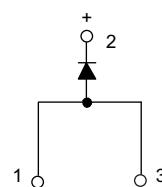



Features

- Glass passivated chip
- Very low leakage current
- Very low forward voltage drop
- Improved thermal behaviour

TO-247-3L

Typical Application

- Diode for main rectification
- For single and three phase bridge configurations


Mechanical Data • Package: TO-247-3L

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free

- **Terminals:** Backside: DBC ceramic , Soldering pins for PCB mounting , Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked

	V_{RSM} V	V_{RRM} V
DSI8080D	800	800
DSI80120D	1200	1200

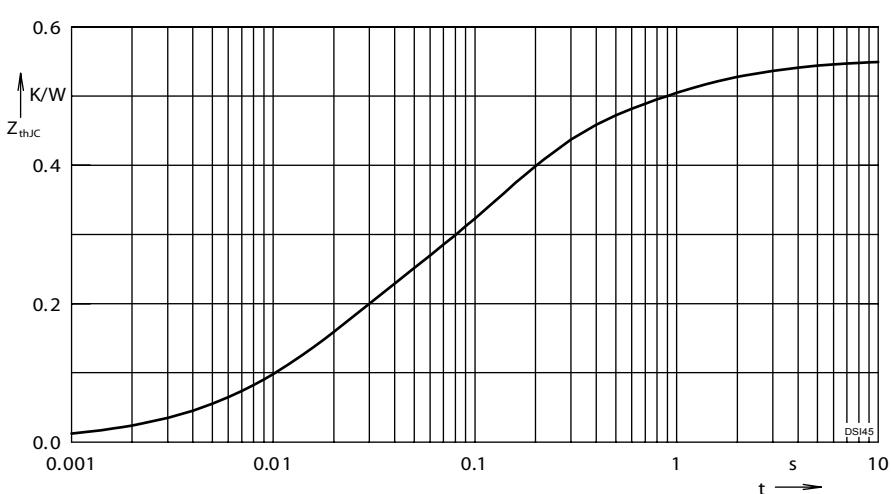
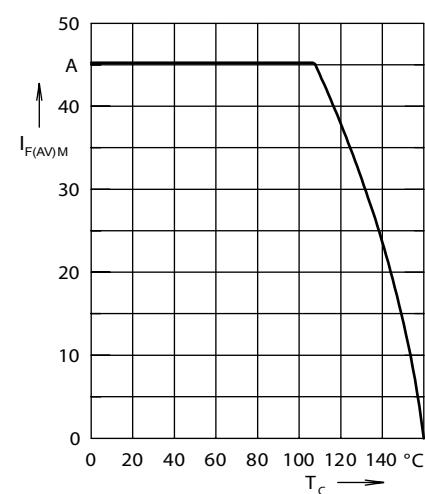
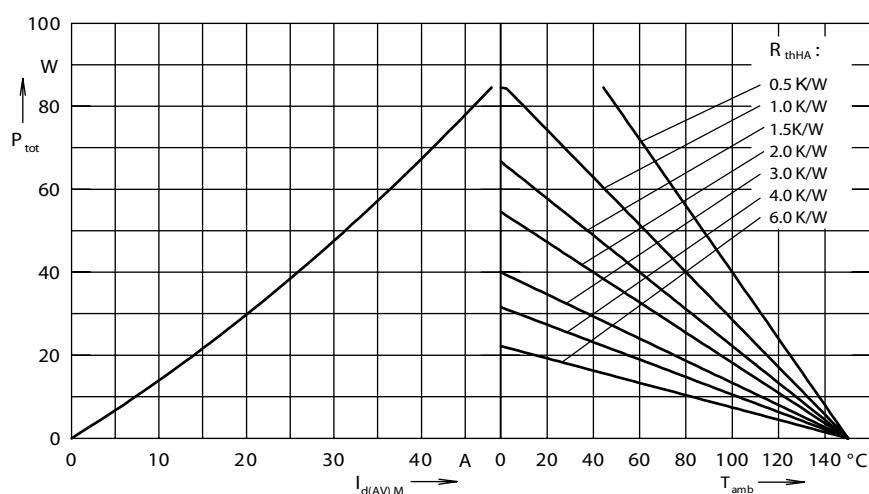
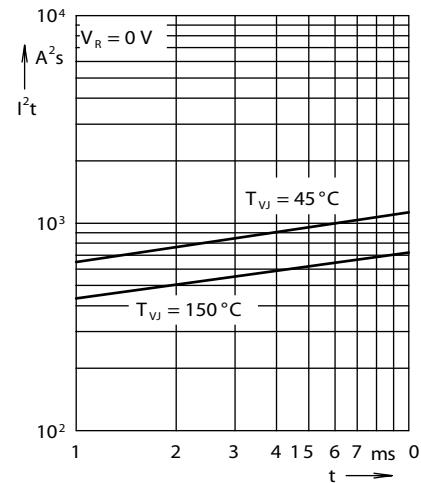
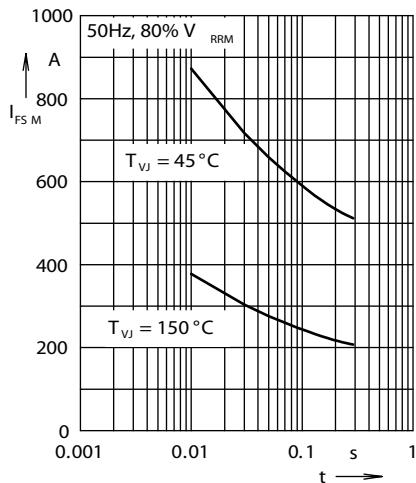
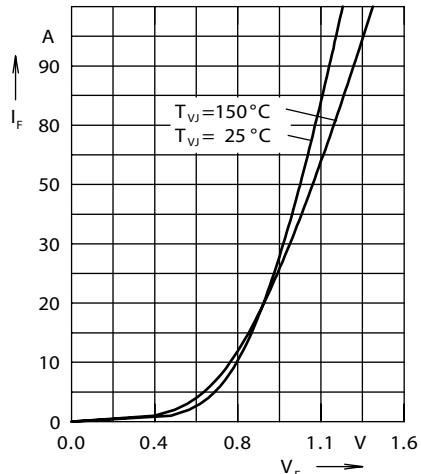
Maximum Ratings

Symbol	Test Conditions	Maximum Ratings	Unit
I _{F(AV)M}	T _c =115°C; 180° sine	80	A
I _{FSM}	T _{vJ} =45°C; t=10ms (50Hz), sine V _R =0V; t=8.3ms (60Hz), sine	1500 1750	A
	T _{vJ} =150°C; t=10ms(50Hz), sine V _R =0V; t=8.3ms(60Hz), sine	760 840	
I ² t	T _{vJ} =45°C; t=10ms (50Hz), sine V _R =0V; t=8.3ms (60Hz), sine	1120 1120	A ² s
	T _{vJ} =150°C; t=10ms(50Hz), sine V _R =0V; t=8.3ms(60Hz), sine	720 720	
T _{vJ} T _{VJM} T _{stg}		-40...+175 175 -40...+175	°C
M _d	Mounting torque	0.8...1.2	Nm
	Non-Isolated		
Weight		6	g

Symbol	Test Conditions	Characteristic Values	Unit
I _R	T _{vJ} =T _{VJM} ; V _R =V _{RRM}	≤ 3	mA
V _F	I _F =80A; T _{vJ} =25°C	≤ 1.15	V
V _{To}	For power-loss calculations only	0.8	V
r _T	T _{vJ} =T _{VJM}	8	mΩ
R _{thJC} R _{thCH}	DC current typical	0.55 0.2	K/W



■ Characteristics(Typical)



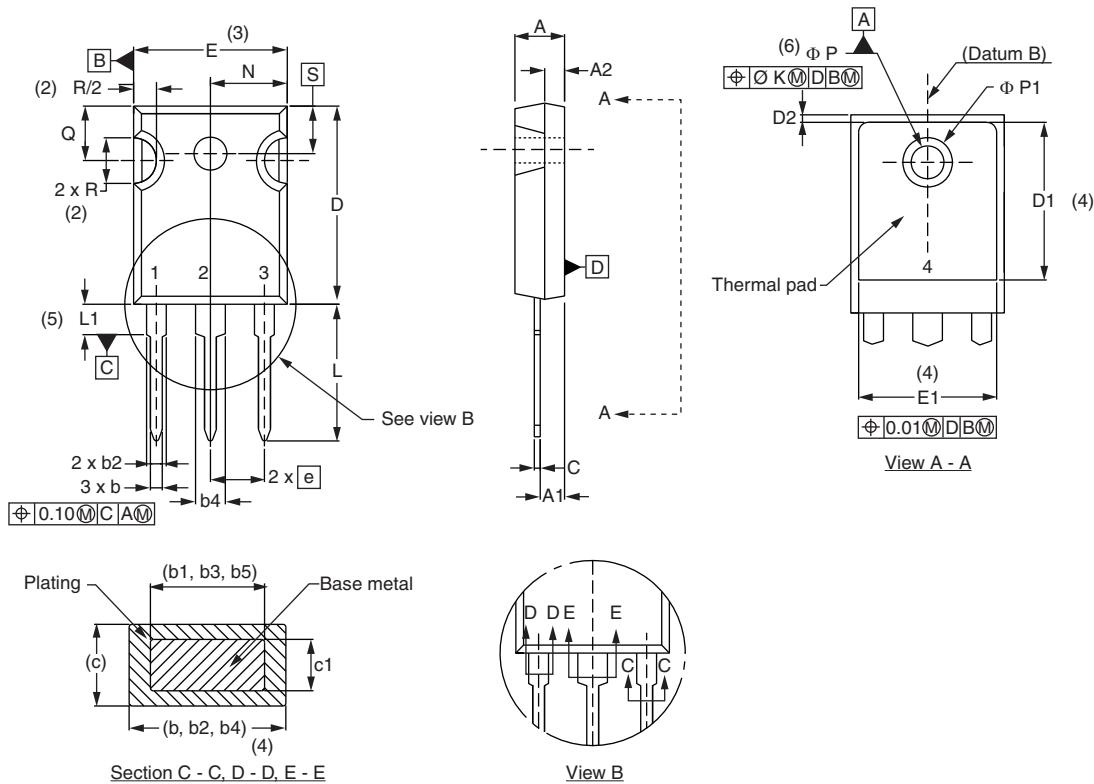
Constants for Z_{thJC} calculation:

i	R_{thi} (K/W)	t_i (s)
1	0.1633	0.016
2	0.2517	0.118
3	0.0933	0.588
4	0.04167	2.6



■ Outline Dimensions

TO-247-3L



SYMBOL	MILLIMETERS		INCHES		NOTES		SYMBOL	MILLIMETERS		INCHES		NOTES
	MIN.	MAX.	MIN.	MAX.				MIN.	MAX.	MIN.	MAX.	
A	4.65	5.31	0.183	0.209			D2	0.51	1.35	0.020	0.053	
A1	2.21	2.59	0.087	0.102			E	15.29	15.87	0.602	0.625	3
A2	1.17	1.37	0.046	0.054			E1	13.46	-	0.53	-	
b	0.99	1.40	0.039	0.055			e	5.46 BSC		0.215 BSC		
b1	0.99	1.35	0.039	0.053			Ø K	0.254		0.010		
b2	1.65	2.39	0.065	0.094			L	14.20	16.10	0.559	0.634	
b3	1.65	2.34	0.065	0.092			L1	3.71	4.29	0.146	0.169	
b4	2.59	3.43	0.102	0.135			N	7.62 BSC		0.3		
b5	2.59	3.38	0.102	0.133			Ø P	3.56	3.66	0.14	0.144	
c	0.38	0.89	0.015	0.035			Ø P1	-	7.39	-	0.291	
c1	0.38	0.84	0.015	0.033			Q	5.31	5.69	0.209	0.224	
D	19.71	20.70	0.776	0.815	3		R	4.52	5.49	0.178	0.216	
D1	13.08	-	0.515	-	4		S	5.51 BSC		0.217 BSC		

Packge	Packing	Box Size L×W×H(mm)	Quatity(pcs/box)	Carton Size L×W×H(mm)	Quatity(pcs/carton)
TO-247	30pcs/Tube	570×155×50	450	580×340×125	1800