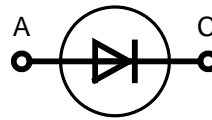


Super Fast Recovery Diode

$I_{F AVM} = 63 \text{ A}$
 $V_{RRM} = 1400-1800 \text{ V}$
 $t_{rr} = 40 \text{ ns}$

V_{RSM}	V_{RRM}	Type
V	V	
1400	1400	DSDI 60-14A
1600	1600	DSDI 60-16A
1800	1800	DSDI 60-18A



A = Anode, C = Cathode

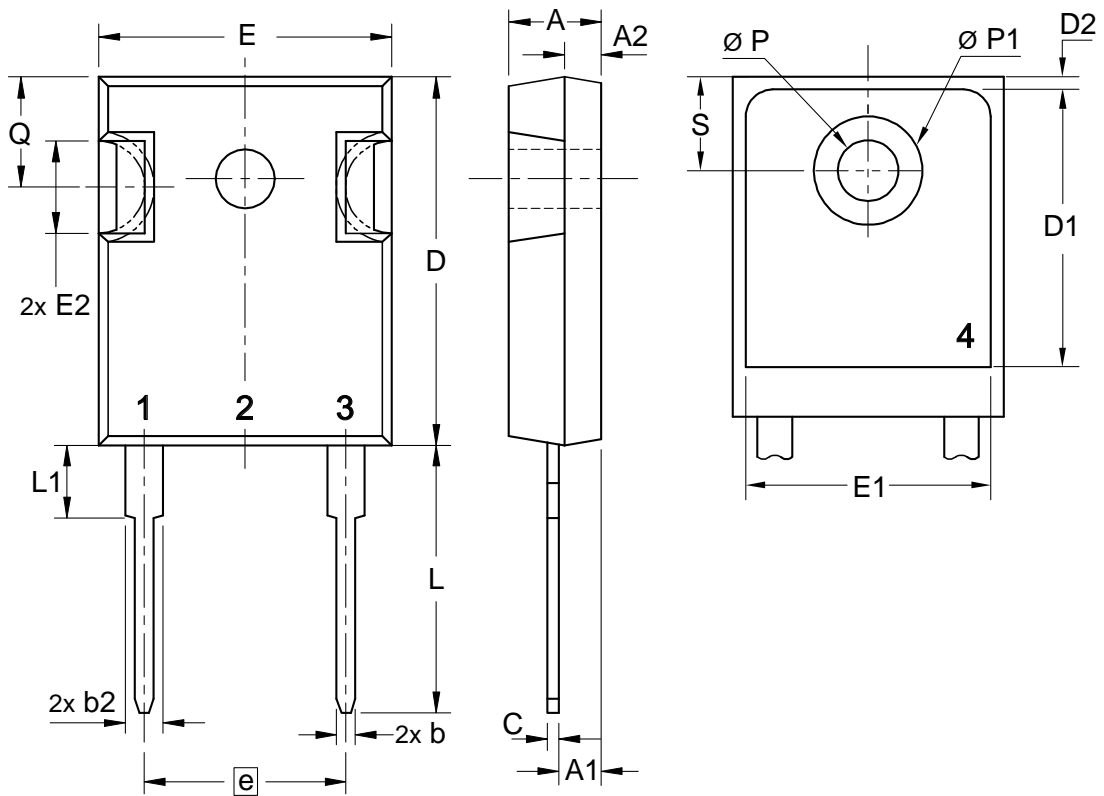
Symbol	Conditions	Maximum Ratings	Features
I_{FRMS}	$T_{VJ} = T_{JM}$	100 A	<ul style="list-style-type: none"> International standard package JEDEC TO-247AD Planar passivated chip sets Very short recovery time Extremely low switching losses Low r_{rr} values Soft recovery behaviour Epoxymount meets UL94V-0 Crimp lead distance between leads 8.5 mm
$I_{FAVM}^{(1)}$	$T_C = 60^\circ\text{C}$; rectangular, $d = 0.5$	63 A	
I_{FRM}	$t_p < 10 \mu\text{s}$; repetitive rating, pulse width limited by T_{VJM}	800 A	
I_{FSM}	$T_{VJ} = 45^\circ\text{C}$; $t = 10 \text{ ms}$ (50 Hz), sine	500 A	
	$t = 8.3 \text{ ms}$ (60 Hz), sine	540 A	
	$T_{VJ} = 150^\circ\text{C}$; $t = 10 \text{ ms}$ (50 Hz), sine	450 A	
	$t = 8.3 \text{ ms}$ (60 Hz), sine	480 A	
I^2t	$T_{VJ} = 45^\circ\text{C}$; $t = 10 \text{ ms}$ (50 Hz), sine	1250 A ² s	
	$t = 8.3 \text{ ms}$ (60 Hz), sine	1200 A ² s	
	$T_{VJ} = 150^\circ\text{C}$; $t = 10 \text{ ms}$ (50 Hz), sine	1000 A ² s	
	$t = 8.3 \text{ ms}$ (60 Hz), sine	950 A ² s	
T_{VJ}		-40...+150 °C	
T_{VJM}		150 °C	
T_{stg}		-40...+150 °C	
P_{tot}	$T_C = 25^\circ\text{C}$	4.16 W	
M_d	Mounting torque	0.8...1.2 Nm	
Weight typical		6 g	

Symbol	Conditions	Characteristic Values		
		typ.	max.	
I_R	$V_R = V_{RRM}$	$T_{VJ} = 25^\circ\text{C}$	1	2 mA
	$V_R = 0.8 V_{RRM}$	$T_{VJ} = 25^\circ\text{C}$	0.5	mA
	$V_R = 0.8 V_{RRM}$	$T_{VJ} = 125^\circ\text{C}$	3	mA
V_F	$I_F = 7.0 \text{ A}$	$T_{VJ} = 125^\circ\text{C}$	2.6	V
		$T_{VJ} = 25^\circ\text{C}$	4.1	V
V_{TO}	Forward power-loss calculations only			1.9 V
r_T	$T_{VJ} = T_{JM}$			10 mW
R_{thJC}				0.4 K/W
			0.25	K/W
t_{rr}	$I_F = 1 \text{ A}$; $-di/dt = 200 \text{ A}/\mu\text{s}$; V_{30V} ; $T_{VJ} = 25^\circ\text{C}$			40 ns
t_{rr}	$I_F = 7.0 \text{ A}$; $-di/dt = 5.00 \text{ A}/\mu\text{s}$	$T_{VJ} = 25^\circ\text{C}$		300 ns
			$V_R = 1000 \text{ V}$	60
t_{rr}	$I_F = 7.0 \text{ A}$; $-di/dt = 5.00 \text{ A}/\mu\text{s}$	$T_{VJ} = 125^\circ\text{C}$		400 ns
			$V_R = 1000 \text{ V}$	85

Data according to IEC 60747

⁽¹⁾ I_{FAVM} rating includes reverse blocking losses at $T_C = 60^\circ\text{C}$, duty cycle $d = 0.5$

D imensions T O -24 7 AD



Sym.	Inches		Millimeter	
	min.	max.	min.	max.
A	0.185	0.209	4.70	5.30
A1	0.087	0.102	2.21	2.59
A2	0.059	0.098	1.50	2.49
D	0.819	0.845	20.79	21.45
E	0.610	0.640	15.48	16.24
E2	0.170	0.216	4.31	5.48
e	0.430 BSC		10.92 BSC	
L	0.780	0.800	19.80	20.30
L1	-	0.177	-	4.49
Ø P	0.140	0.144	3.55	3.65
Q	0.212	0.244	5.38	6.19
S	0.242 BSC		6.14 BSC	
b	0.039	0.055	0.99	1.40
b2	0.065	0.094	1.65	2.39
b4	0.102	0.135	2.59	3.43
c	0.015	0.035	0.38	0.89
D1	0.515	-	13.07	-
D2	0.020	0.053	0.51	1.35
E1	0.530	-	13.45	-
Ø P1	-	0.29	-	7.39