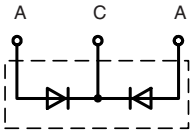
Power Schottky Rectifier

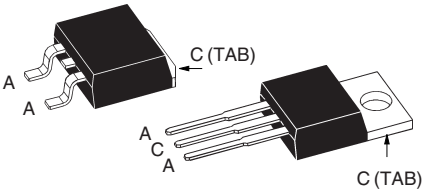
I_{FAV} = 2x 10 A
V_{RRM} = 25 V
V_F = 0.40 V

Preliminary Data

V_{RSM} V	V_{RRM} V	Type
25	25	DSSK 18-0025B
25	25	DSSK 18-0025BS



TO-263 AB (...S-Type)



TO-220 AC

A = Anode, C = Cathode , TAB = Cathode

Symbol	Conditions	Maximum Ratings	
I_{FRMS}		35	A
I_{FAV}	T_C = 140°C; rectangular, d = 0.5	10	A
I_{FAV}	T_C = 140°C; rectangular, d = 0.5; per device	20	A
I_{FSM}	T_{VJ} = 45°C; t_p = 10 ms (50 Hz), sine	140	A
E_{AS}	I_{AS} = tbd A; L = 180 µH; T_{VJ} = 25°C; non repetitive	tbd	mJ
I_{AR}	V_A =1.5 • V_{RRM} typ.; f = 10 kHz; repetitive	tbd	A
$(dv/dt)_{cr}$		tbd	V/µs
T_{VJ}		-55...+150	°C
T_{VJM}		150	°C
T_{stg}		-55...+150	°C
P_{tot}	T_C = 25°C	75	W
M_d	mounting torque	0.4...0.6	Nm
Weight	typical	2	g

Symbol	Conditions	Characteristic Values typ.	max.	
I_R ①	T_{VJ} = 25°C V_R = V_{RRM}		10	mA
	T_{VJ} = 100°C V_R = V_{RRM}		40	mA
V_F	I_F = 10 A; T_{VJ} = 125°C		0.37	V
	I_F = 10 A; T_{VJ} = 25°C		0.45	V
	I_F = 20 A; T_{VJ} = 125°C		0.51	V
R_{thJC}			1.7	K/W
R_{thCH}		0.5		K/W

Pulse test: ① Pulse Width = 5 ms, Duty Cycle < 2.0 %
Data according to IEC 60747 and per diode unless otherwise specified

Features

- International standard package
- Very low V_F
- Extremely low switching losses
- Low I_{RM}-values
- Epoxy meets UL 94V-0

Applications

- Rectifiers in switch mode power supplies (SMPS)
- Free wheeling diode in low voltage converters

Advantages

- High reliability circuit operation
- Low voltage peaks for reduced protection circuits
- Low noise switching
- Low losses

Dimensions see Outlines.pdf