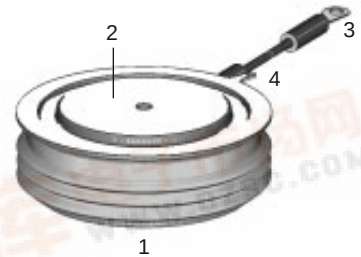
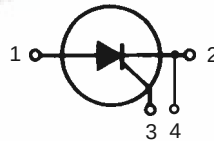




$$\begin{aligned} I_{\text{TRMS}} &= 2300 \text{ A} \\ I_{\text{TAVM}} &= 1000 \text{ A} \\ V_{\text{RRM}} &= 1800 - 2500 \text{ V} \end{aligned}$$

V

V_{RSM}	V_{RRM}	Type
V_{DSM}	V_{DRM}	
V	V	
1800	1800	CS 1011 - 18io1
2200	2200	CS 1011 - 22io1
2500	2500	CS 1011 - 25io1



Symbol	Test Conditions	Maximum Ratings
I_{TRMS}	$T_c = 82^\circ\text{C}; 180^\circ \text{ sine}$	2300 A
I_{TAVM}		1000 A
I_{TSM}	$T_{\text{VJ}} = 45^\circ\text{C}; V_{\text{R}} = 0$	$t = 10 \text{ ms (50 Hz), sine}$ 19800 A $t = 8.3 \text{ ms (60 Hz), sine}$ 21000 A
	$T_{\text{VJ}} = T_{\text{VJM}}; V_{\text{R}} = 0$	$t = 10 \text{ ms (50 Hz), sine}$ 18000 A $t = 8.3 \text{ ms (60 Hz), sine}$ 20000 A
$\int i^2 dt$	$T_{\text{VJ}} = 45^\circ\text{C}; V_{\text{R}} = 0$	$t = 10 \text{ ms (50 Hz), sine}$ 1960000 A ² s $t = 8.3 \text{ ms (60 Hz), sine}$ 1830000 A ² s
	$T_{\text{VJ}} = T_{\text{VJM}}; V_{\text{R}} = 0$	$t = 10 \text{ ms (50 Hz), sine}$ 1620000 A ² s $t = 8.3 \text{ ms (60 Hz), sine}$ 1660000 A ² s
$(di/dt)_{\text{cr}}$	$T_{\text{VJ}} = T_{\text{VJM}}; f = 5 \text{ Hz}; t_p = 200 \text{ ms}; V_{\text{D}} = 1/2 V_{\text{DRM}}; I_{\text{G}} = 2 \text{ A}; di_{\text{G}}/dt = 2 \text{ A}/\mu\text{s}$	repetitive, $I_{\text{T}} = 2500 \text{ A}$ 320 A/ μs
$(dv/dt)_{\text{cr}}$	$T_{\text{VJ}} = T_{\text{VJM}}; R_{\text{GK}} = \infty; \text{method 1 (linear voltage rise)}$	$V_{\text{DR}} = 2/3 V_{\text{DRM}}$ 1000 V/ μs
P_{GM}	$T_{\text{VJ}} = T_{\text{VJM}}; I_{\text{T}} = I_{\text{TAVM}}$	$t_p = 30 \mu\text{s}$ 120 W $t_p = 500 \mu\text{s}$ 60 W $t_p = 10 \text{ ms}$ 16 W
V_{RGM}		5 V
T_{VJ}		-40...+125 °C
T_{VJM}		125 °C
T_{stg}		-40...+ 50 °C
M_{d}	Mounting force	24 ... 28 kN
Weight		600 g

Features

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-
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Typical Applications

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Symbol	Test Conditions	Characteristic Values
I_R, I_D	$T_{VJ} = T_{VJM}; V_R = V_{RRM}; V_D = V_{DRM}$	≤ 60 mA
V_T	$I_T = 3.14 I_{TAVM}; T_{VJ} = 25^\circ\text{C}$	≤ 2.1 V
V_{T0}	For power-loss calculations only ($T_{VJ} = 125^\circ\text{C}$)	1.2 V
r_T		0.32 mΩ
V_{GT}	$V_D = 12$ V; $T_{VJ} = 25^\circ\text{C}$	≤ 3.0 V
I_{GT}	$V_D = 12$ V; $T_{VJ} = 25^\circ\text{C}$	≤ 300 mA
V_{GD}	$T_{VJ} = T_{VJM}; V_D = 2/3 V_{DRM}$	≤ 0.25 V
I_L	$T_{VJ} = 25^\circ\text{C}; t_p = 10$ μs $I_G = 2$ A; $di_G/dt = 2$ A/μs	≤ 1.0 A
I_H	$T_{VJ} = 25^\circ\text{C}; V_D = 12$ V; $R_{GK} = \infty$	≤ 0.3 A
t_{gd}	$T_{VJ} = 25^\circ\text{C}; V_D = 500$ V $I_G = 2$ A; $di_G/dt = 2$ A/μs	≤ 2.5 μs
t_q	$T_{VJ} = T_{VJM}; I_T = 1000$ A, $t_p = 200$ μs; $di/dt = -10$ A/μs typ. 150 μs $V_R = 100$ V; $dv/dt = 50$ V/μs; $V_D = 2/3 V_{DRM}$	
R_{thJC}		0.02 K/W

Dimensions in mm (1 mm = 0.0394")

