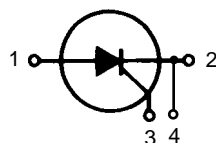

**SC**

$I_{TRMS} = 2300 \text{ A}$   
 $I_{TAVM} = 1000 \text{ A}$   
 $V_{RRM} = 1800 - 2500$



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
$I_{TSM}$	$T_{VJ} = 45^\circ\text{C}; V_R = 0$	t = 10 ms (50 Hz), sine 19800 A t = 8.3 ms (60 Hz), sine 21000 A
	$T_{VJ} = T_{VJM}; V_R = 0$	t = 10 ms (50 Hz), sine 18000 A t = 8.3 ms (60 Hz), sine 20000 A
$\int i^2 dt$	$T_{VJ} = 45^\circ\text{C}; V_R = 0$	t = 10 ms (50 Hz), sine 1960000 A <sup>2</sup> s t = 8.3 ms (60 Hz), sine 1830000 A <sup>2</sup> s
	$T_{VJ} = T_{VJM}; V_R = 0$	t = 10 ms (50 Hz), sine 1620000 A <sup>2</sup> s t = 8.3 ms (60 Hz), sine 1660000 A <sup>2</sup> s
$(di/dt)_{cr}$	$T_{VJ} = T_{VJM}; f = 5\text{ Hz}; t_p = 200\text{ ms}; V_D = 1/2 V_{DRM}; I_G = 2\text{ A}; di_G/dt = 2\text{ A}/\mu\text{s}$	repetitive, $I_T = 2500\text{ A}$ 320 A/ $\mu\text{s}$
$(dv/dt)_{cr}$	$T_{VJ} = T_{VJM}; R_{GK} = \infty; \text{method 1 (linear voltage rise)}$	$V_{DR} = 2/3 V_{DRM}$ 1000 V/ $\mu\text{s}$
$P_{GM}$	$T_{VJ} = T_{VJM}; I_T = I_{TAVM}$	$t_p = 30\ \mu\text{s}$ 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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### Typical Applications

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Data according to DIN/IEC 747-6

IXYS reserves the right to change limits, test conditions and dimensions

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

### Dimensions in mm (1 mm = 0.0394")

