

Technical Data

THYRISTOR



maximum ratings

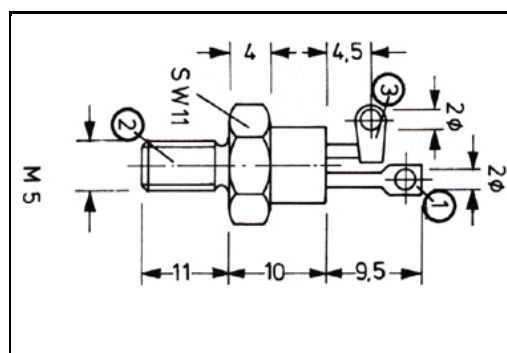
VDRM	1200.0	V	NO.	BTW42-1200R
VRRM	1200.0	V	TYPE	THYRISTOR
IT (AV)	10.0	A		
IT (RMS)	16.0	A		
ITSM (tp = 10 ms)	150.0	A	CASE	TO-64_M-5
Max. Power Dissipation (PT) at TC = 25 °C		W		
Max. Thermal Resistance (Rth J-C)	1.8	°C/W		
Max. Junction Temperature (TJ)	125.0	°C		

PERFORMANCE CHARACTERISTICS at $T_c = 25^\circ\text{C}$, unless otherwise noted

NO.	SYMBOL	CONDITIONS	MIN.	MAX.	UNITS
1.	IDRM	VDRM = 1200.0 V, TJ = 125.0 °C	-	3.0	mA
2.	IRRM	VRRM = 1200.0 V, TJ = 125.0 °C	-	3.0	mA
3.	IGT	VD = 6.0 V	-	40.0	mA
4.	VGT	VD = 6.0 V	-	1.5	V
5.	IH	VD = 6.0 V	-	80.0	mA
6.	di/dt	IGT = 0.2 A, diG/dt = 0.2 A/s	-	50.0	A/μs
7.	dv/dt	VDRM = 840.0 V, TJ = 125.0 °C	200.0	-	V/μs
8.	VTM	IT = 20.0 A (1)	-	2.0	V
9.	PGM	tp = 30.0 μs	-	10.0	W
10.	I ² t	tp = 10.0 ms	-	112.0	A ² s
11.	tq	di/dt = 20.0 A/μs (2)	-	60.0	μs
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					

Notes (1) pulse-tested $t_p \leq 300 \mu\text{s}$, duty cycle $\leq 2\%$
 (2) typical value

DIMENSIONS
in mm



Marking BTW42-1200R
 Customer GENERAL PURPOSE