**Features:**

- n Soft reverse recovery characteristic
- n Ultrafast reverse recovery time
- n Low reverse recovery loss
- n High surge current capability
- n Low inductance package

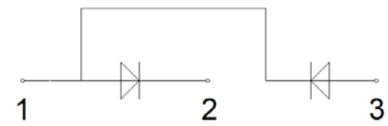
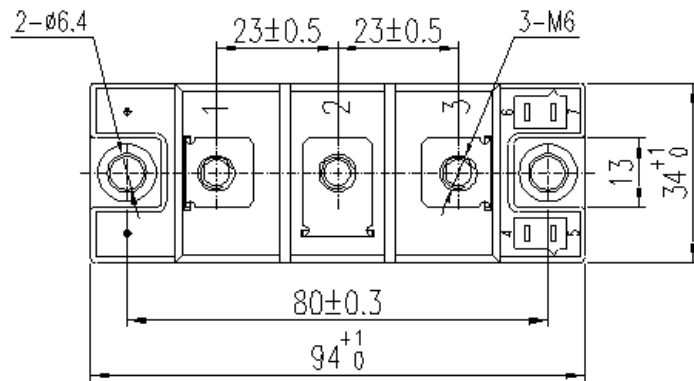
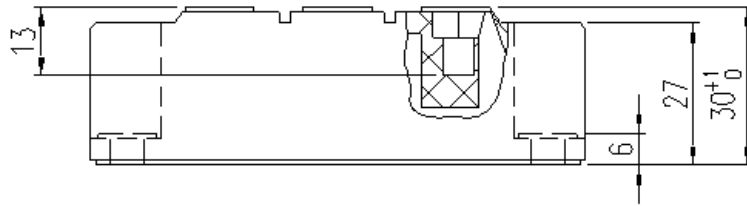
Typical Applications:

- n Inversion welder
- n Uninterruptible power supply (UPS)
- n Plating power supply

V _{RRM}	Type & Outline
600V	MRC300-06-229H3

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T _j (°C)	VALUE			UNIT
				Min	Type	Max	
I _{F(AV)}	Mean forward current	180° half sine wave 50Hz Single side cooled, T _c =110°C	150			300	A
I _{F(RMS)}	RMS forward current					420	A
I _{FSM}	Surge forward current	1/2 cycle, 50Hz, sine	45		2.9		kA
I ² t	I ² t for fusing coordination	t=10ms, 50Hz, sine			42.05		10 ³ A ² s
P _D	Power dissipation				890		W
I _{RM}	V _R =600V		25			0.5	mA
			125			5	mA
V _{FM}	Peak forward voltage	I _{FM} =300A	25		1.40	1.65	V
t _{rr}	Reverse recovery time	I _F =1A, V _R =30V, di _F /dt=-200A/μs			65		ns
t _{rr}	Reverse recovery time	V _R =300V, I _F =300A, di _F /dt=-200A/μs	25		145		ns
I _{R(RM)}	Max. reverse recovery current				17		A
t _{rr}	Reverse recovery time		125		240		ns
I _{R(RM)}	Max. reverse recovery current				30		A
R _{th(j-c)}	Thermal resistance Junction to case	Single side cooled per chip				0.14	°C/W
V _{iso}	Isolation voltage	50Hz, R.M.S, t=1min, I _{iso} :1mA(MAX)		3000			V
F _m	Terminal connection torque(M6)			4.5		6.0	N·m
	Mounting torque(M6)			4.5		6.0	N·m
T _{vj}	Junction temperature			-40		150	°C
T _{stg}	Stored temperature			-40		125	°C
W _t	Weight				165		g
Outline	229H3						

Outline:



Unmarked dimensional tolerance: $\pm 0.5\text{mm}$

TECHSEM reserves the right to change specifications without notice.