

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## MSKD36; MSAD36; MSCD36



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## Glass Passivated Rectifier Diode Modules

**VRRM** 800 to 1800V **IFAV** 36 Amp

#### **Applications**

- Non-controllable rectifiers for AC/AC converters
- Line rectifiers for transistorized AC motor controllers
- · Field supply for DC motors

#### **Features**

- Blocking voltage:800 to 1800V
- Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- Glass passivated chip
- · UL E243882 approved

**Module Type** 

TYPE			VRRM	Vrsm	
MSCD36-08	MSAD36-08	MSKD36-08	800V	900V	
MSCD36-12	MSAD36-12	MSKD36-12	1200V	1300V	
MSCD36-16	MSAD36-16	MSKD36-16	1600V	1700V	
MSCD36-18	MSAD36-18	MSKD36-18	1800V	1900V	

**Maximum Ratings** 

Symbol	Conditions	Values	Units
IFAV	Single phase ,half wave 180° conduction Tc=104℃	36	Α
IF(RMS)	Single phase ,half wave 180° conduction Tc=100℃	52	A
IFSM	t=10mS Tvj =45℃	650	А
i <sup>2</sup> t	t=10mS Tvj =45℃	2100	A <sup>2</sup> s
Visol	a.c.50HZ;r.m.s.;1min	3000	V
Tvj		-40 to +150	$^{\circ}$
Tstg		-40 to +125	$^{\circ}$
Mt	To terminals(M5)	3±15%	Nm
Ms	To heatsink(M6)	5±15%	Nm
Weight	Module (Approximately)	100	g

#### **Thermal Characteristics**

Symbol	Conditions	Values	Units	
Rth(j-c)	Per diode	1.0	°C/W	
Rth(c-s)	Module	0.1	°C/W	

#### **Electrical Characteristics**

Symbol	Conditions	Values			Units
Syllibol	Conditions		Тур.	Max.	Uiilis
VFM	T=25℃ IF =100A	_	1.18	1.25	V
IRD	Tvj=150°C VRD=VRRM	_	_	5	mA

#### **Performance Curves**

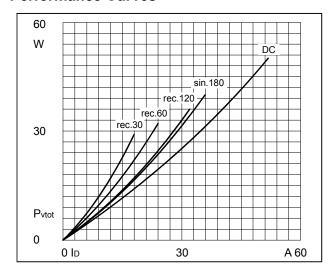


Fig1. Power dissipation

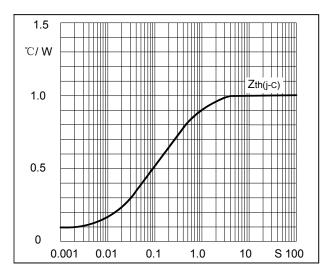
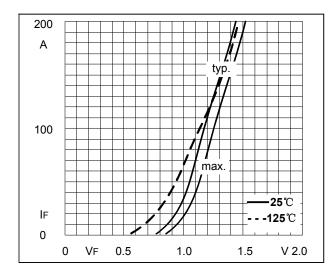
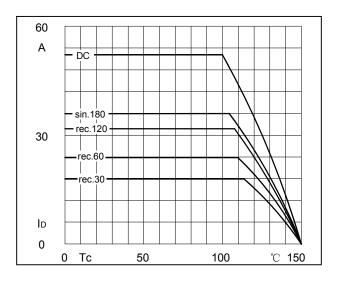


Fig3. Transient thermal impedance





**Fig2.Forward Current Derating Curve** 

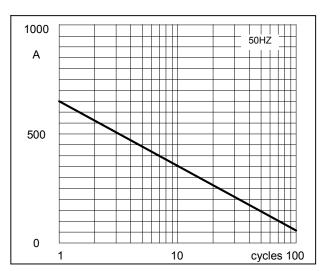


Fig4. Max Non-Repetitive Forward Surge Current



Fig5. Forward Characteristics

### **Package Outline Information**

