

10A SMD Schottky Barrier Rectifiers

Features

- Low profile package
- Built-in strain relief
- Low power loss, High efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- RoHS compliant



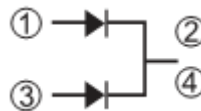
DPAK (TO-252)



Mechanical Data

Case:	DPAK (TO-252), molded plastic body
Epoxy:	Plastic package has Underwriters Laboratory
Terminals:	Solder plated, solderable per MIL-STD-750,Method 2026
Mounting Position:	Any
Weight:	Appox.0.297gram

Pining information and Symbol



10A SMD Schottky Barrier Rectifiers

MBRD1040CT - MBRD10200CT

Maximum Ratings ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	MBRD 1040CT	MBRD 1045CT	MBRD 1050CT	MBRD 1060CT	MBRD 1080CT	MBRD 1090CT	MBRD 10100CT	MBRD 10150CT	MBRD 10200CT	Unit	Conditions
V_{RRM}	Maximum Repetitive Peak Reverse Voltage	40	45	50	60	80	90	100	150	200	V	
V_R	Maximum DC Blocking Voltage	40	45	50	60	80	90	100	150	200	V	
V_R (RMS)	RMS Reverse Voltage	28	31.5	35	42	56	63	70	105	140		
I_{F(AV)}	Maximum Average Forward Rectified Current	10									A	Fig1.
I_{FSM}	Peak Forward Surge Current	100									A	8.3ms single half sine-wave superimposed on rated load (JEDEC methode)
T_J	Operating Junction Temperature Range	-55 to +150	-65 to +175								° C	
T_{STG}	Storage Temperature Range	-55 to +150	-65 to +175								° C	

Electrical Characteristics ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	MBRD1040CT MBRD1045CT	MBRD1050CT MBRD1060CT	MBRD1080CT MBRD1090CT MBRD10100CT	MBRD10150CT MBRD10200CT	Unit	Conditions
V _F	Maximum Instantaneous Forward Voltage per Diode	0.70	0.75	0.80	0.90	V	I _F =5A per diode
I _R	Maximum Instantaneous Reverse Current	0.05				mA	V _R =V _{RRM} , T _J =25°C
		20					V _R =V _{RRM} , T _J =100°C
R _{θJC}	Typical Thermal Resistance junction to case	3.0				° C/W	

10A SMD Schottky Barrier Rectifiers

MBRD1040CT - MBRD10200CT

Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

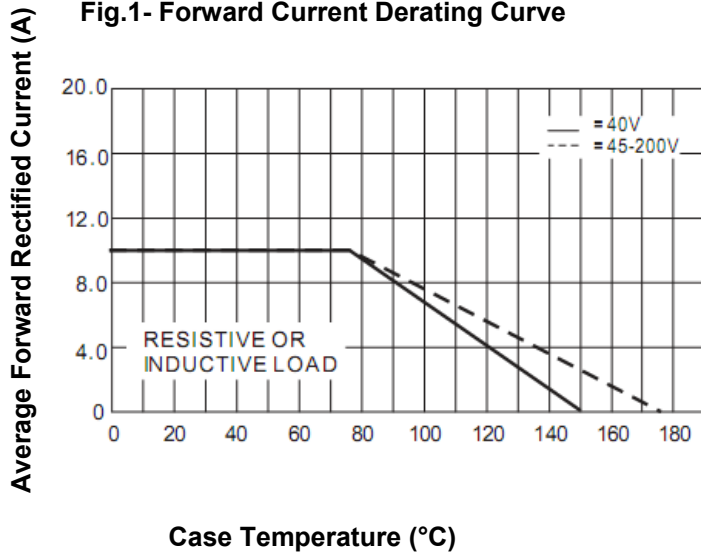


Fig.2- Typical Forward Characteristics

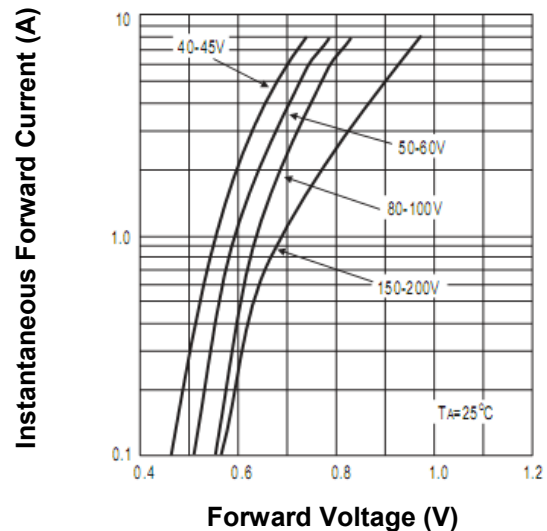


Fig.3- Peak Forward Surge Current

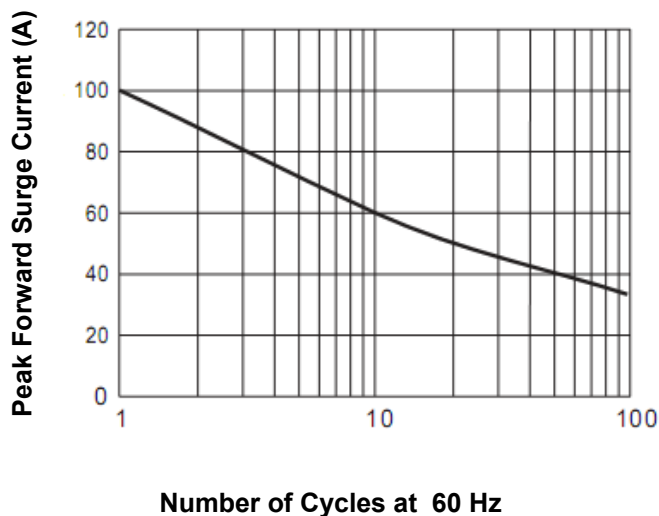
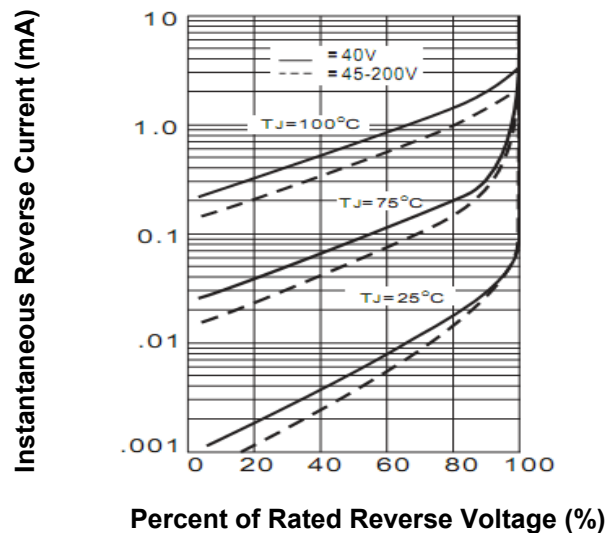


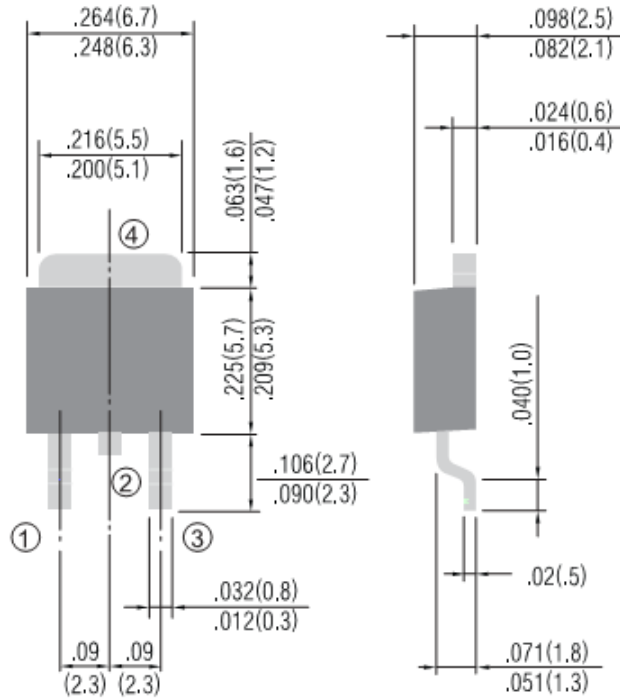
Fig.4- Typical Reverse Characteristics



10A SMD Schottky Barrier Rectifiers

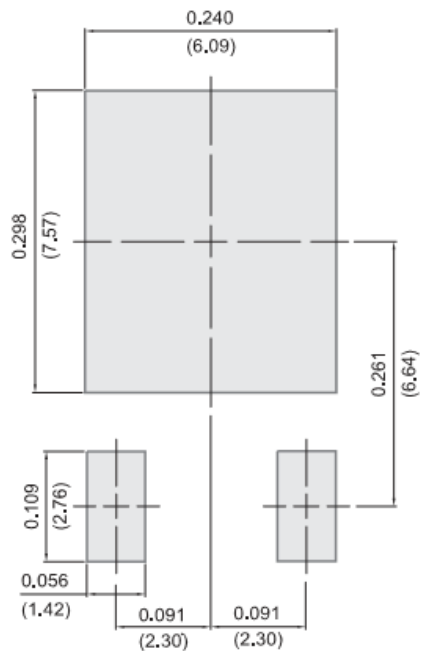
MBRD1040CT - MBRD10200CT

Dimensions in inches (mm)



DPAK (TO-252)

Soldering Pad in inch (mm)



10A SMD Schottky Barrier Rectifiers

MBRD1040CT - MBRD10200CT

Packing Quantity Information:

Quantity	PCS per Inner Box	PCS per Carton
TR30 Tape & Reel	3000/Reel	42000

How to contact us:

US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: taitron@taitroncomponents.com

Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.
42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

TAITRON COMPONENTS INCORPORATED E REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931