



Micro Commercial Components



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# MBR2520CT THRU MBR2560CT

## 25 Amp Schottky Barrier Rectifier 20 to 100 Volts

### Features

- Meant of Silicon Rectifier, Majority Conduction
- Guard ring for transient protection
- High surge capacity
- High Current Capability, High Efficiency
- Halogen free available upon request by adding suffix "-HF"
- Marking : type number
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +175°C
- Mounting Torque: 5 in-lbs Maximum

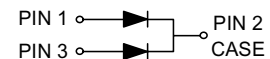
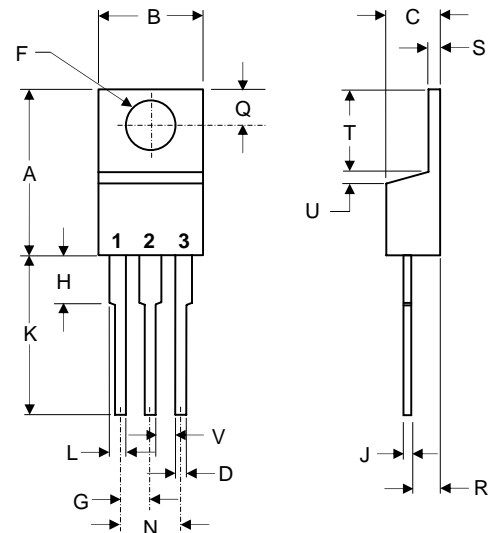
MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR2520CT	20V	14V	20V
MBR2530CT	30V	21V	30V
MBR2535CT	35V	24.5V	35V
MBR2540CT	40V	28V	40V
MBR2545CT	45V	31.5V	45V
MBR2560CT	60V	42V	60V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	25 A	$T_C = 130^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 2520CT-2540CT 2545CT-2560CT	$V_F$	.82V .75V	$I_{FM} = 25A;$ $I_{FM} = 15A;$ per leg $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage 2520CT-2540CT 2545CT-2560CT	$I_R$	0.2mA 1mA	$T_A = 25^\circ\text{C}$
Typical Junction Capacitance	$C_J$	450pF	Measured at 1.0MHz, $V_R=4.0V$

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

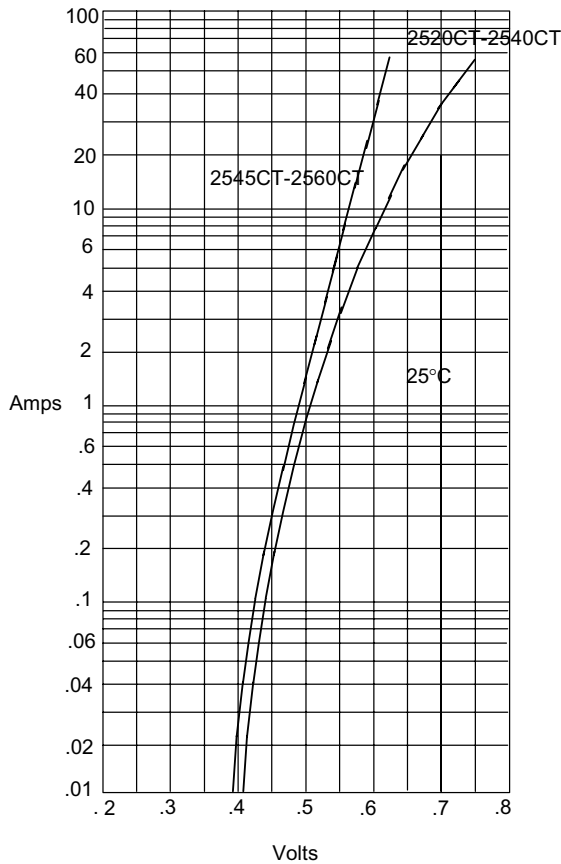
### TO-220AB



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.140	.190	3.56	4.82	
D	.020	.045	0.51	1.14	
F	.139	.161	3.53	4.09	∅
G	.190	.110	2.29	2.79	
H	---	.250	---	6.35	
J	.012	.025	0.30	0.64	
K	.500	.580	12.70	14.73	
L	.045	.060	1.14	1.52	
N	.190	.210	4.83	5.33	
Q	.100	.135	2.54	3.43	
R	.080	.115	2.04	2.92	
S	.045	.055	1.14	1.39	
T	.230	.270	5.84	6.86	
U	----	.050	----	1.27	
V	.045	----	1.15	----	

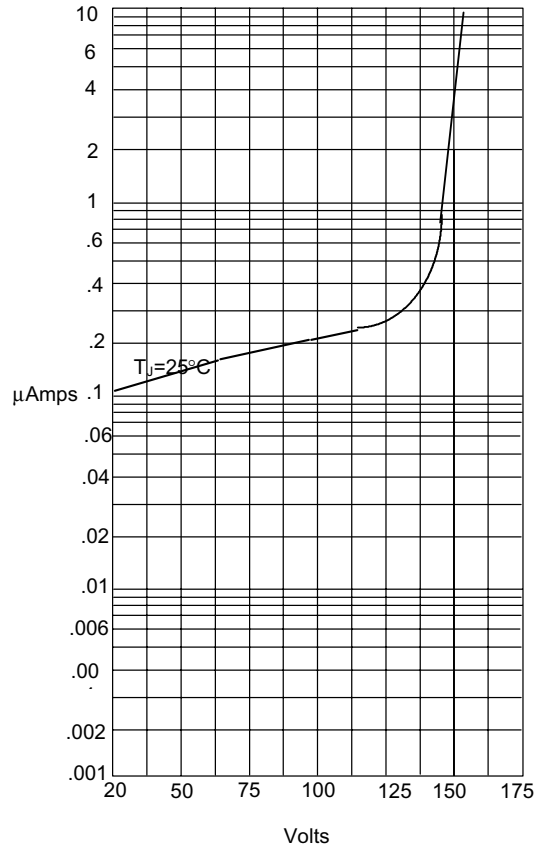
# MBR2520CT thru MBR2560CT

Figure 1  
Typical Forward Characteristics



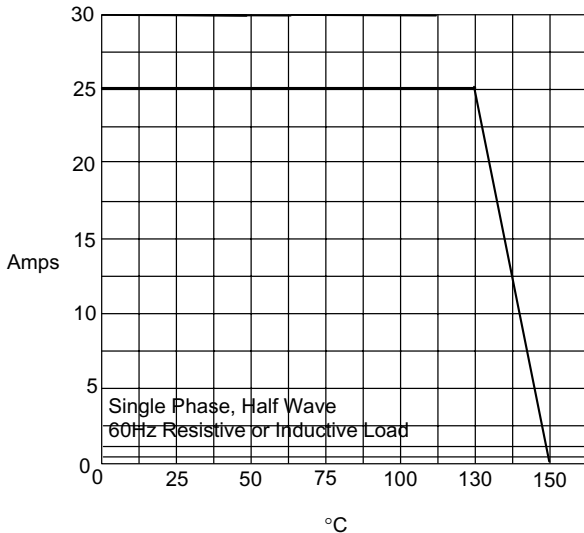
Instantaneous Forward Current - Amperes *versus* Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



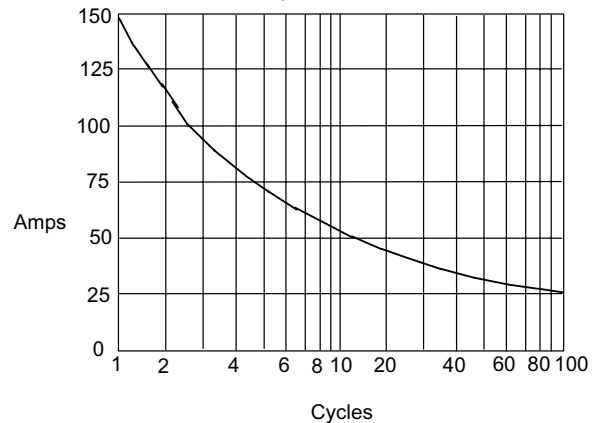
Instantaneous Reverse Leakage Current - MicroAmperes *versus* Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus* Case Temperature - °C

Figure 4  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus* Number Of Cycles At 60Hz - Cycles



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## Ordering Information

Device	Packing
(Part Number)-BP	Bulk;1Kpcs/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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