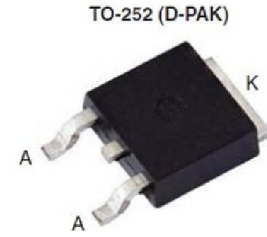
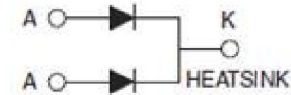


Features

- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal of silicon rectifier, majority carrier conduction
- Low forward voltage, high efficiency
- Guarding for over voltage protection



Package: TO-252(D-PAK)



Mechanical Data

- Case: Epoxy Molded
- Weight: 0.4grams (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 sec
- Shipped 2500 units per reel

Maximum Ratings & Electrical Characteristics

($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	TEST CONDITIONS		SYMBOL	MBRD1545CT	UNIT
Maximum repetitive peak reverse voltage			V_{RRM}	45	V
Working peak reverse voltage			V_{RWM}	45	V
Maximum DC blocking voltage			V_{DC}	45	V
Maximum average forward rectified current at $T_c=105^{\circ}\text{C}$ total device per diode			$I_F(AV)$	15 7.5	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			I_{FSM}	125	A
Peak repetitive reverse current per leg at $t_p=2.0\mu\text{s}$, 1KHz			I_{RRM}	1.0	A
Voltage rate of change(rated V_R)			DV/dt	10000	V/ μs
Operating junction temperature range			T_J	-55 to +150	$^{\circ}\text{C}$
Storage temperature range			T_{STG}	-55 to +150	$^{\circ}\text{C}$
Maximum instantaneous forward voltage per leg	$I_F=7.5\text{A}$ $I_F=7.5\text{A}$	$T_c=25^{\circ}\text{C}$ $T_c=125^{\circ}\text{C}$	V_F	0.52 0.47	V
Maximum reverse current per leg at working peak Reverse voltage			I_R	200 15	μA mA

Thermal Characteristics $T_A=25^{\circ}\text{C}$ unless otherwise noted

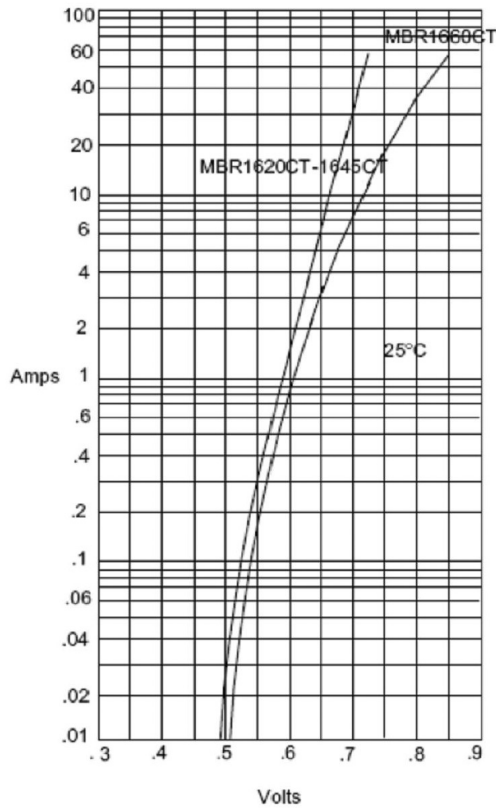
Symbol	Parameter	TYP(TO-252)	Unit
$R_{\theta JC}$	Thermal Resistance, Junction to Case per Leg	3.5	$^{\circ}\text{C}/\text{W}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient per Leg	62.5	$^{\circ}\text{C}/\text{W}$

Note: Pulse test: 300 μs pulse width, duty cycle=2%

Ratings and Characteristics Curves

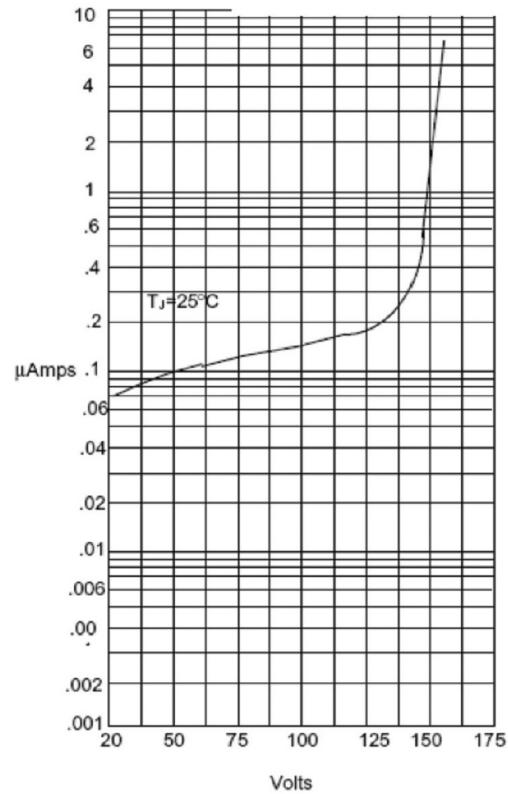
($T_A = 25^\circ\text{C}$ unless otherwise noted)

Figure 1
Typical Forward Characteristics



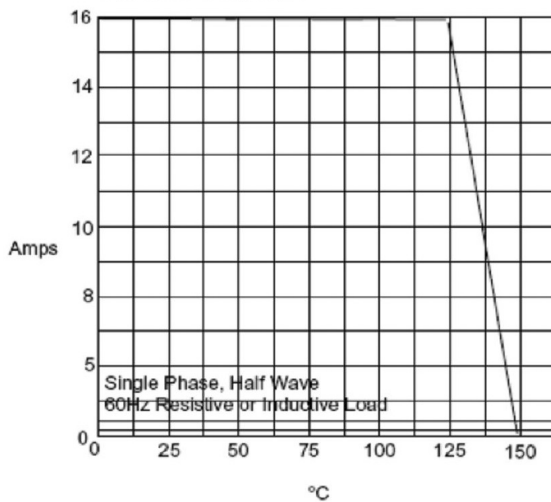
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Revers



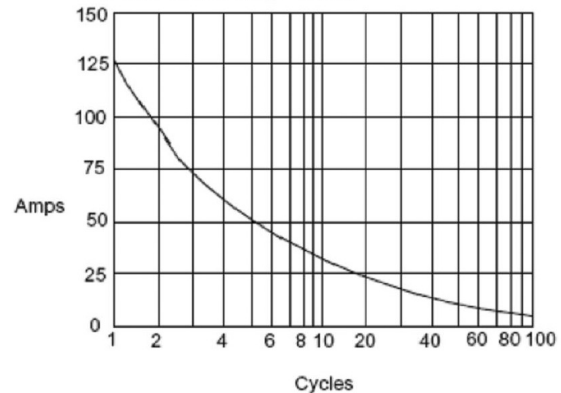
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C

Figure 4
Peak Forward Surge Current



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

Package Outline Dimensions

Unit: millimeters

TO-252(D-PAK)

