

PRODUCT CHARACTERISTICS

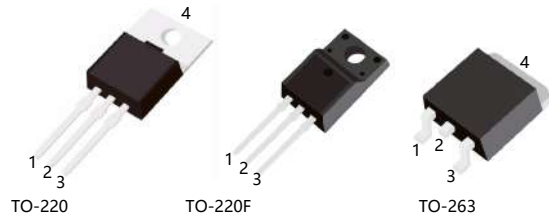
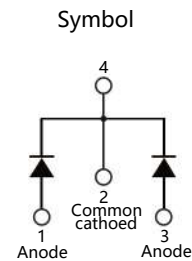
$V_R @ I_C = 0.5mA$	300V
$V_F (Typ @ I_F = 5A)$	0.82V
$I_R (@ V_R = 300V)$	50 μ A
I_D	10A

APPLICATION

Case epoxy molded
Leds are readily solderable

FEATURES

Guard ring for stress protection
Low forward voltage
Low power loss high efficiency
High surge capacity
Pb free packages are available



ORDER INFORMATION

Order codes		Package	Packing
Halogen-free	Halogen		
N/A	MBR10300F	TO-220F	50pieces/Tube
N/A	MBR10300A	TO-220	50pieces/Tube
N/A	MBR10300E	TO-263	800pieces/Reel

MAXIMUM RATINGS(Each diode leg)

Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	V_R	300	V
Average rectified output current	Total	10	A
	Pre leg	5	A
Non-repetitive peak forward surge current 8.3ms single half sine-wave superimposed on reate loda	I_{FSM}	150	A
Operating and storage temperature range	T_J, T_{STG}	-55 to 175	$^{\circ}$ C

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Peak repetitive reverse voltage	V_R	$I_C = 0.5mA, T_J = 25^{\circ}C$	300	-	-	V
Forward voltage drop	V_F	$I_F = 5A, T_J = 25^{\circ}C$	-	0.82	0.86	V
Leakage current	I_R	$V_R = 300V, T_J = 25^{\circ}C$	-	-	0.05	mA
		$V_R = 300V, T_J = 125^{\circ}C$	-	-	6	mA

■ TYPICAL CHARACTERISTICS

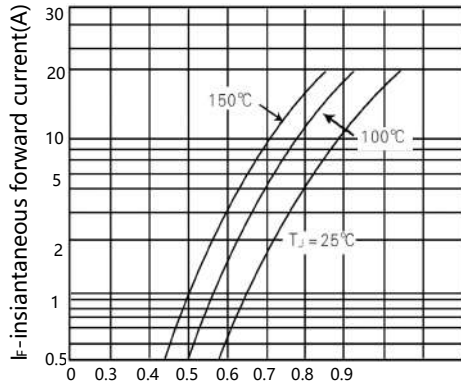


Figure 2 typical forward voltage per diode

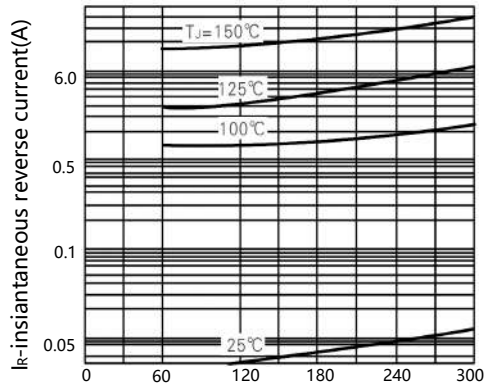


Figure 2 typical reverse current per diode

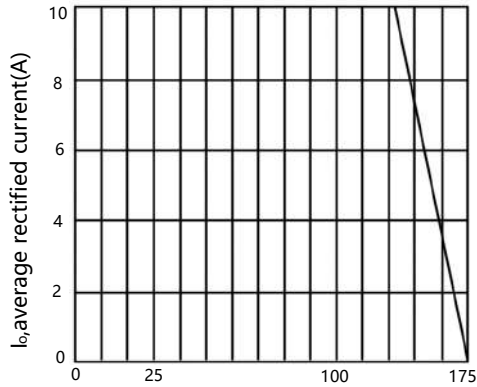


Figure 3 forward current derating curve

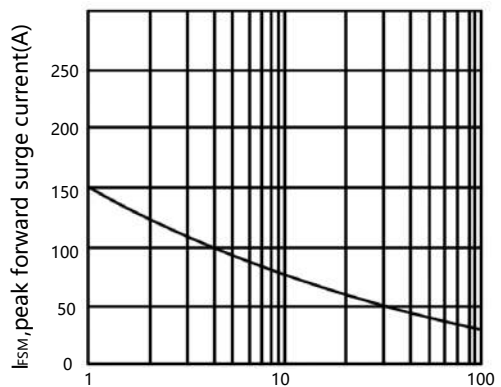
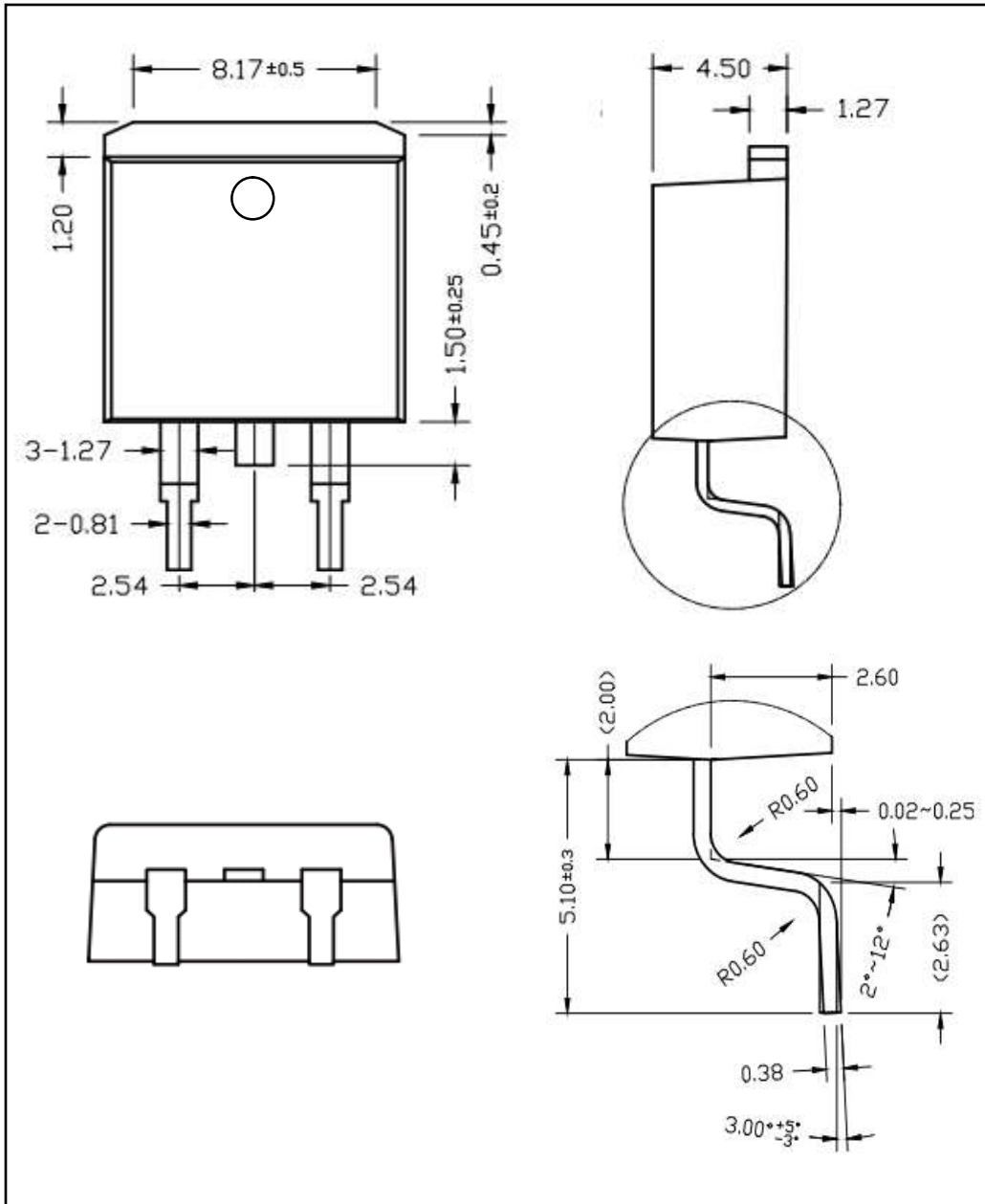


Figure 4 max non-repetitive surge current

■ TO-263-2L PACKAGE OUTLINE DIMENSIONS



■ TO-220-3L PACKAGE OUTLINE DIMENSIONS

