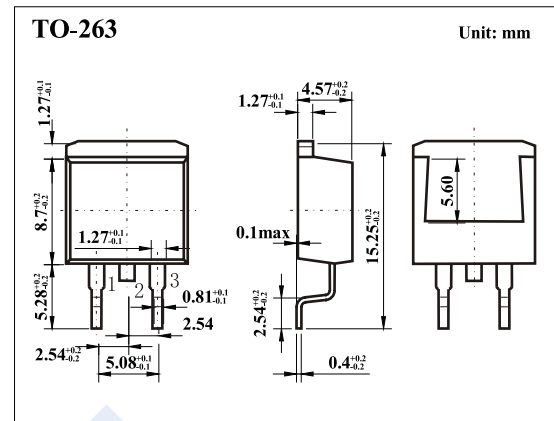
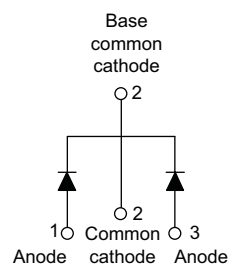


Schottky Rectifiers

MBR2035CS ~ MBR20200CS (KBR2035CS ~ KBR20200CS)

■ Features

- Forward current 20A
- Reverse voltage 35-200V
- Low reverse leakage
- High forward surge capability



■ Absolute Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	MBR20 35CS	MBR20 45CS	MBR20 50CS	MBR20 60CS	MBR20 100CS	MBR20 200CS	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	35	45	50	60	100	200	V
Maximum RMS voltage	V_{RMS}	24	31	35	42	72	140	
Maximum DC Blocking Voltage	V_{DC}	35	45	50	60	100	200	
Maximum average forward rectified current	$I_{F(AV)}$	20 10 (per leg)						A
Peak forward surge current 8.3ms single half sine-wave	I_{FSM}	150						
Maximum forward voltage at $I_F=10.0A$	$T_A=25^\circ C$	V_F	0.60	0.80	0.85	0.99	V	
	$T_A=100^\circ C$		0.54	0.75	0.75	0.87		
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^\circ C$	I_R	0.1	0.15	1.0	mA		
	$T_A=125^\circ C$		50	150	50			
Typical junction capacitance	C_j	400	320				pF	
Typical thermal resistance $V_R = 4.0V, f = 1MHz MAX.$	R_{thJC}	1.0				2.0	°C/W	
Junction Temperature	T_j	150						°C
Storage Temperature	T_{stg}	-55 to +150						

Schottky Rectifiers

MBR2035CS ~ MBR20200CS (KBR2035CS ~ KBR20200CS)

■ Typical Characteristics

FIG.1- FORWARD CURRENT DERATING CURVE

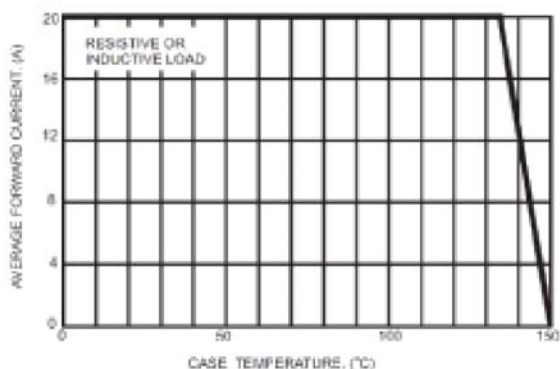


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

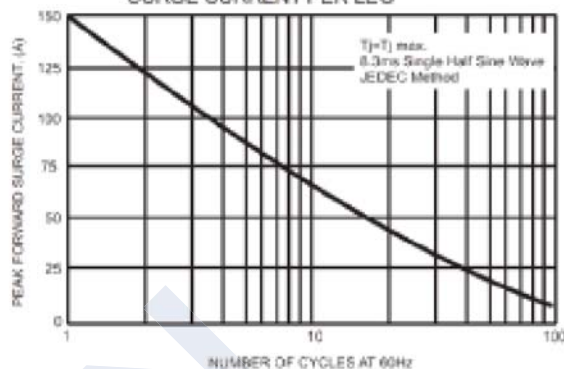


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

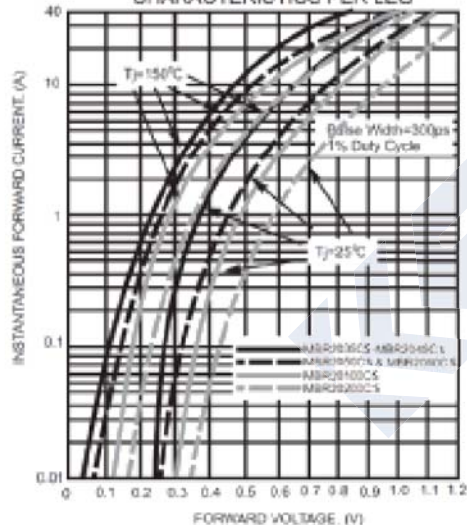


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

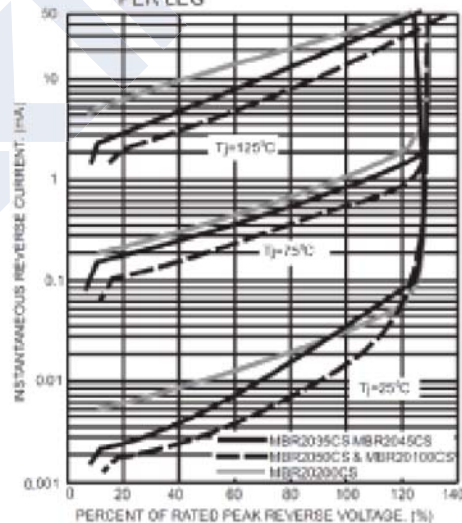


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

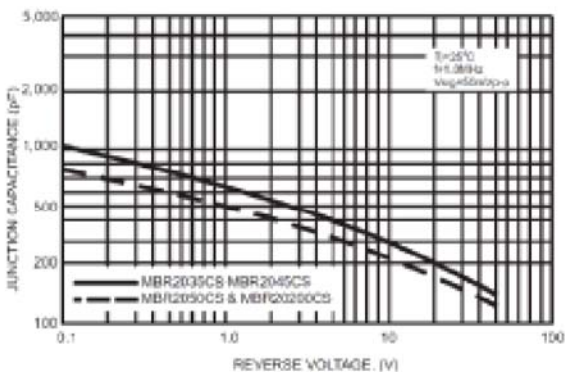


FIG.6- TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG

