

**Features**

- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Low Forward Voltage Drop and Low Power Losses
- Very Low Profile and Typical Height of 1.7 mm

**Maximum Ratings @ 25°C (Unless Otherwise Specified)**

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	60	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{RMS}$	42	V
Average Rectified Forward Current	$I_{F(AV)}$	15	A
Per Diode Per Device		30	
Non-Repetitive Peak Surge Current (Per Diode) @8.3ms Half Sine Wave	$I_{FSM}$	150	A
Current Squared Time(Per Diode) @ 1ms≤t≤8.3ms	$I^2t$	93	A <sup>2</sup> s

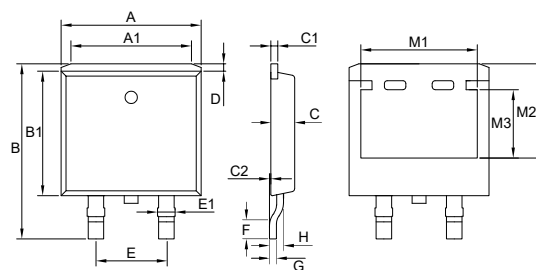
**Internal Structure**

Pin	Description	Simplified Outline	Graphic Symbol
2&4	Cathode		
1&3	Anode		

Note :  
 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.  
 2. High temperature solder exemption applied, see EU directive annex 7a.

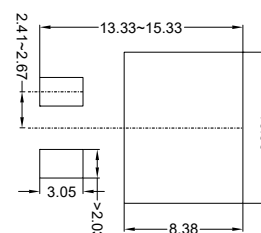
**30 Amp  
Low VF Schottky  
Barrier Rectifiers  
60 Volts**

**TO-263AC**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.388	0.407	9.85	10.35	
A1	0.323	0.339	8.20	8.60	
B	0.467	0.490	11.85	12.45	
B1	0.346	0.361	8.78	9.18	
C	0.062	0.074	1.57	1.87	
C1	0.014	0.026	0.35	0.65	
C2	0.000	0.008	0.00	0.20	
D	0.015	0.027	0.39	0.69	
E	0.196	0.204	4.98	5.18	
E1	0.044	0.056	1.12	1.42	
F	0.051	0.059	1.30	1.50	
G	0.014	0.026	0.35	0.65	
H	0.033	0.049	0.85	1.25	
M1	0.327	0.343	8.30	8.70	
M2	0.264	0.280	6.70	7.10	
M3	0.185	0.201	4.70	5.10	

**Suggested Solder Pad Layout(mm)**



## Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
$T_J$	Operating Junction Temperature Range		-55		150	°C
$T_{stg}$	Storage Temperature Range		-55		150	°C
$R_{th(J-C)}$	Thermal Resistance from Junction to Case			2		°C/W
$R_{th(J-A)}$	Thermal Resistance from Junction to Ambient			40		°C/W

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	$V_F$	$I_F=5A; T_J=25^\circ C$		0.44	0.53	V
		$I_F=5A; T_J=125^\circ C$		0.35	0.42	
		$I_F=15A; T_J=25^\circ C$		0.59	0.70	
		$I_F=15A; T_J=125^\circ C$		0.57	0.65	
Reverse Current	$I_R$	$V_R=60V; T_J=25^\circ C$			0.1	mA
		$V_R=60V; T_J=125^\circ C$			50	
Junction Capacitance	$C_J$	$V_R=4V; f=1MHz; T_J=25^\circ C$		1360		pF

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

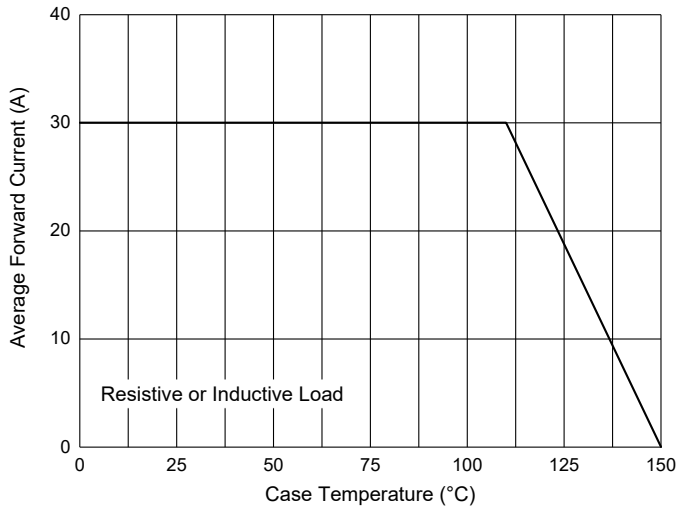


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

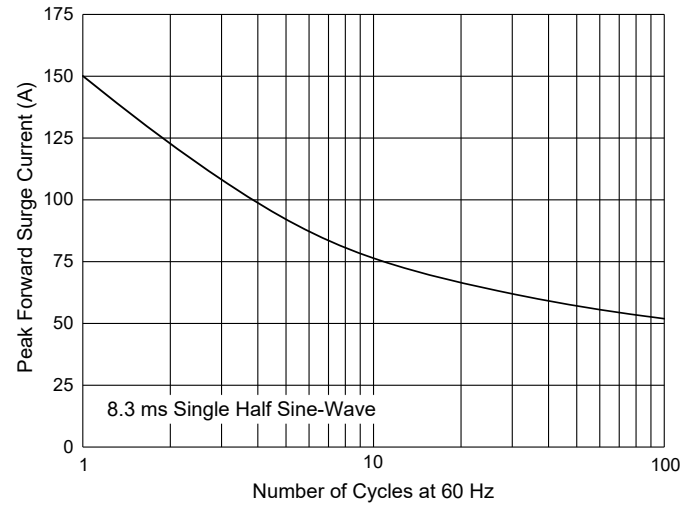


Fig. 3 - Typical Forward Characteristics

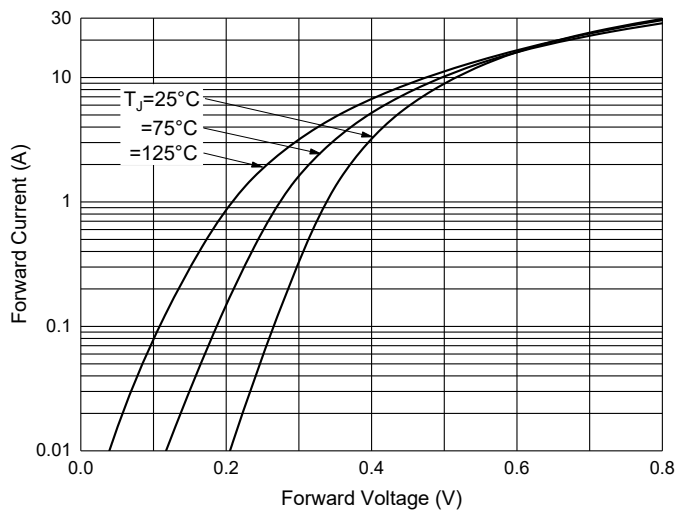


Fig. 4 - Typical Reverse Leakage Characteristics

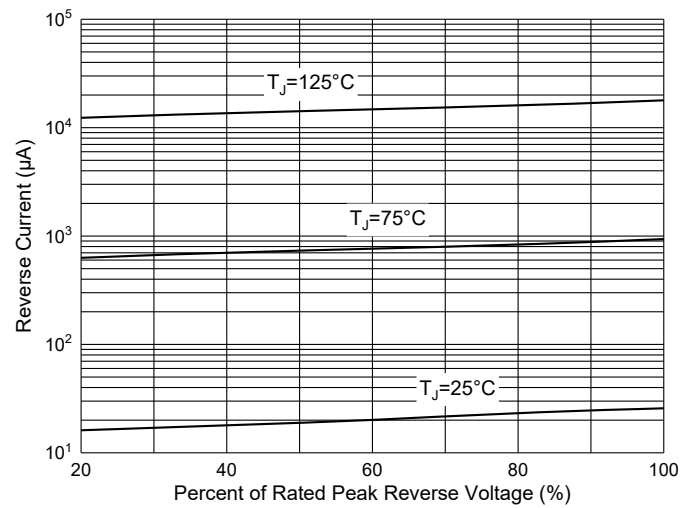
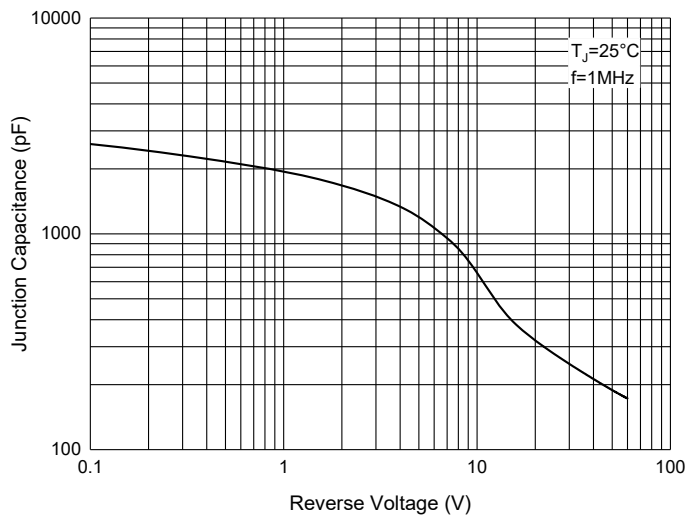


Fig. 5 - Typical Capacitance Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 1500pcs/Reel

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